<110> Rosen et al.

<120> 36 Human Secreted Proteins

<130> PZ022P1

<140> Unassigned
<141> 1999-07-07

<150> PCT/US99/00108
<151> 1999-01-06

<150> 60/070,567
<151> 1998-01-07

<150> 60/070,692
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<160> 196

<170> PatentIn Ver. 2.0

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tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg     240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact     300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca accccatcg     360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc     420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct     480
atcccaagcg catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga     540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg     600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc     660
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<212> PRT
<213> Homo sapiens

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<222> (3)
<223> Xaa equals any of the twenty naturally ocurring L-amino acids

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<212> DNA
<213> Homo sapiens

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cccgaaatat ctgccatctc aattag                                        86


<210> 4
<211> 27
<212> DNA
<213> Homo sapiens

<400> 4
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<210> 5
<211> 271
<212> DNA
<213> Homo sapiens

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ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg    60
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gcccctaact ccgcccagtt ccgcccattc tccgcccat ggctgactaa ttttttttat    180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt   240
ttttggaggc ctaggctttt gcaaaaagct t                                  271


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<211> 32
<212> DNA
<213> Homo sapiens

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<210> 7
<211> 31
<212> DNA
<213> Homo sapiens

<400> 7
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<210> 8
<211> 12
<212> DNA
<213> Homo sapiens
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<210> 8
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<211> 73
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<213> Homo sapiens

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ccatctcaat tag   73

<210> 10
<211> 256
<212> DNA
<213> Homo sapiens

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caattagtca gcaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc   120
cagttccgcc cattctccgc cccatggctg actaatttt tttatttatg cagaggccga   180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg   240
cttttgcaaa aagctt   256

<210> 11
<211> 1713
<212> DNA
<213> Homo sapiens

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catcacctag gaaaaaagtt tgtaggagga tttttaatcc atatatttgt cttatggcta   120
gataaagatt tctctgaaaa aaagaagcat gtcaggaatc tctgggtgcc cctttttcct   180
ctggggactt ctagcattgt tgggcttggc tttggttata tcactgatct tcaatatttc   240
ccactatgtg gaaaagcaac gacaagataa aatgtacagc tactccagtg accacaccag   300
ggttgatgag tattatattg aagacacacc aatttattgt aacttagatg atatgatttc   360
agaaccaatg gatgaaaatt gctatgaaca aatgaaagcc cgaccagaga aatctgtaaa   420
taagatgcag gaagccaccc catctgcaca ggcaaccaat gaaacacaga tgtgctacgc   480
ctcacttgat cacagcgtta aggggaagcg tagaagccca ggaaacagaa tactcatttc   540
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gactgtttgg attgatccgt gctaagagaa acccattaac tagctggacc atgatctgtt   720
caatgattgg ctcctattga agatgcttc taagaaaaca agatgcacag aggacacaga   780
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acttaaaaaa tgctttacta ctaaaaatgta aaaaattaat gtgctcaccct cggcagcaca   960
tatatcaaaa attaataaga cccagcttga aaattgagcc tgataacaag attacaaatt   1020
cacaatacct aatacttagg gaaatataaa aatttaagca tgaatgtgtt ctggaacacg   1080
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atagcccata attgaaataa atttctgatt gaaaggtata ggaaacatta aaatgcatta   1200
ctaagagaag taatataatt ttcttacaaa gtattttccc caaagatagc tttactatt   1260
caaaaattgt caaattaatg catgctcctt acaacaaaca aatatcaaaa agagtttagg   1320
aattctacta gccagagata gtcacttgga gaaactttct atatatcctt ctaaatatt   1380
ttctgggcat gcttatgtat gtacatcagt tgtttctttt tattttgaac caaaaatgtg   1440
gtttcttttg tacacattac ttaaacttc tttccagtca acaatatatt gtgggatttat   1500

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tttcactgtt atatttaact atatataaat acgcatacat tgtaattcta atgtctgctt    1560
agcaccccac tgataaccaa atcacagttt atttaaataa ttttaatgac ttttcaaaaa    1620
caatttattg atgcaaaaag caaggttgag atgacaatgt ttctttcaat aatcaaaaaa    1680
tactgcttca ctgtcaaaaa aaaaaaaaaa aaa                                 1713
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<210> 12
<211> 2062
<212> DNA
<213> Homo sapiens

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<221> SITE
<222> (1674)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1699)
<223> n equals a,t,g, or c

<400> 12

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aatcaatgat aaatgctaaa tattttatct aaatagtgtt tcaagaaaca gttatggaaa     120
tgtgtacatt raatggctct aatgtggagc ttgtggtatt tcaactcagt attcattact     180
agtcgtgtgt ctggaaagat tgtacttact tttcctctct acactacagt ttgctcttat     240
ggggctctaa actgtttaac tgaagaacct tcgtctgtat tttgattgag cataaattag     300
tattttatga tttccaagat gatgttctta tgtctatcaa gtctatgtat caaatttata     360
acatcattta agaaaaagga atttccacag atacttcagt tgcaatttt tgtttcatgc     420
tactgaaaat acatttgttt ctaggggttg gaatattata gaagatgtag gatgaaagaa     480
aacgatagaa caacgaaaga attctgttta tgaaattaca ggaattgtgt ccactacggt     540
aaagcattgt cattttagta catttctct tagtagtttg gcattttata ctttaaaact     600
tgttttgctc taaaaattgt ttataatgct tacctttctt ctccagtgcc tttagtcttg     660
atttgatatg tttgtaccct cagttacccc ttctattaca tgttttgat gtttttcatg     720
cctaggaaac atcgattcct tttaataat tgtcaatctg attatttaaa gaggtaacaa     780
ttatctgtta atgctttgga aaaacaagta gggttgcctt tggaggccag gcttcttart     840
tcattcaaaa atattcctg gatttatgcc atgtwttaag cattttagc ccccagtatt     900
acaactgtga accaaacgga taaggcccta accattttca gcattctctt tggatggggt     960
gggggattgggg acttaattaa aatagagata tagaaaaata ggcatctaaa taagataata    1020
agtgtggggt tgaaatgaag catctaacaa tagttgaagt tagaagtaat atcttacagt    1080
attgtaacct ctatttaagt ttgggtatta gttacagata gcataaaaaa gccttaactt    1140
ttcacttcc ttgctggcaa aggtacattt atttagactg tccatttaaa gtaatgcttta    1200
acataaacat tactgtgaaa aacattccat tacatattcc caagcaaatg agctgcatct    1260
tctttactgt attttacaat ttagtacaac agttttaggc ctcaatctta acatcactgg    1320
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actttgaaaa tgcattaaat tcttagaaaa gtttggaagcc tctatctttt tttgagttaa    1440
tacttaaatt ctcattactt atattaaatag cctgctactaa gtgaaaatat tatttatgca    1500
agtaaacaag tcactatagg cttttaagac ttttctttaa ttttagattt tgtcatcaaa    1560
gttaaattt tttacctact gtccacttrr atataattta acagtttgta aagtgaaata    1620
gtyttaagta tgatgtatga tgcaccggca tataatgaaa atggcgtgca caangacact    1680
ttactatggg aactgtacng gaagatttat gaaagcatgt gaaattgcac ctaaaattgt    1740
gttattagtg actataagca gcaatgctaa atttattgta cttgatgaat gaatgtattt    1800
agtcacagtt acttttggttt aaatgtataa atgtctttag ggttttttt taaatgtgat    1860
tgtaattttgt actattgtagg gggtatactt ggactgcaggc ggttattgtc aatgtgtgat    1920
ttgtgtttttt atttataaga atcatctaat gtgatatacc aattttttata agtgatattt    1980
acataattct aataactgta tatttgacaa cctattaaaa tgtcttgcat tggaaaaaaa    2040
aaaaaaaaaa aaaaaactcg ta                                            2062
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<210> 13
<211> 1224
<212> DNA
<213> Homo sapiens

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<221> SITE
<222> (1205)
<223> n equals a,t,g, or c

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ccatcccggg agccccgggg agggcacagc tgcctcctcc cgggctcccc tgccacctgg     120
tgcctacctg cccctgctc cctgccgggt ccggtcctca cccatcttc atctggcctt       180
gactctgccc ttgaggggcc taggggtgca gccagcctgc tccgagctcc cctgcagatg     240
gaggaggcca tcctggtcca ctgcgtgctg gggctcctgc tgctgcccat cctggccatg     300
ttgatggcac tgtgtgtgca ctgccacaga ctgccaggct cctacgacag cacatcctca     360
gatagtttgt atccaaaggg gcatgcagtt caaacggcct cacacggttg cccctggcc     420
acctgcctac ccacctgtca cctcctaccc acccctgagc cagccagacc tgctccccat     480
cccaagatcc ccgcagcccc ttgggggctc ccaccggacg ccatcttccc ggcgggattc     540
tgatggtgcc aacagtgtgg cgagctacga aacgaggaac cagcctgtga ggatgcggat     600
gagatgagga cgactatcac aacccaggct acctggtggt gcttcctgac agcacccgg     660
ccactacact gctgccccat cagctcctgc actcagcacc cctggcatcc gagacagtgc     720
cttctccatg gagtccattg atgattacgt gaacgttccg gagagcgggg agagcgcaga     780
agcgtctctg gatggcagcc gggagtatgt gaatgtgtcc caggaactgc atcctggagc     840
ggctaagact gagcctgccg ccctgagttc ccaggaggca gaggaagtgg aggaagaggg     900
ggctccagat tacgagaatc tgcaggagct gaactgaggg cctgtggagg ccgagtctgt     960
cctggaacca ggcttgcctg ggacggctga gctgggcagc tggaagtggc tctggggtcc    1020
tcacatgtgcg tcctgcccctt gctccagccct gacaacagcc tgagaaatcc ccccgtaact    1080
tattatcact ttggggttcg gcctgtgccc ccgaacgctc tgaccttctg acgcagcctg    1140
agaatgacct gcctggcccc agccctactc tggtaataca ataaaggcct gcgtgtgtct    1200
gtgtnaaaaa aaaaaaaaa aaaa                                             1224


<210> 14
<211> 1621
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1596)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1607)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1616)
<223> n equals a,t,g, or c

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gcttgcaggg gctaggctta cacaagccag ccaagattga gaaggtaggg gagtgctttc     120
aatggaggcc atagtgtca tctttcttc tgagcaggct ctaggacaaa caatgagcaa       180
attgagatgt cctgtattgg gaggatgagg ctgatatgtt tcatcattct cagaatttgt     240
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gggctagagc acctttttgg gaatatgggc ctaggggraaa agaacggtca cttacctgga        300
cactatggcc atagtcttga gtttttcctag tcagcatgtg attggtttgta ccttaagttt        360
atgmcaccaa aaatactatt aactctgtta ttttgttct taatcccatc tcaaaattagt        420
ttctagagtt agaatcagaa cacaaggatg ctcattttca catggaggga aagttgccaa        480
agcatttaaa aaataacccc aaaagtatat ctagcagtga agcttggtag ataaaggtga        540
actgctaaac agacactggc gtgccacact cctgccaggg cagtctcatt gtgtcgtgacg        600
gtgctgcaac actgccagta ttacttgaga tgcagtctct ctccccttgtt ctcagttcct        660
gggctcagcc ctcctccaag gcctgccagt gagtagcwgt ttgcaaggca ggccaaggga        720
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gcccccatgg gtaataggca agcatgatgg ctgatagaga agtcagtgca tgagttacta        840
tcacatgtcc cccaacccc tcctgccacc tcccagggct ctggataatt gaatcttcct        900
gagtcccaca gctgggagact caaccaggat atagctgtaa atgcccaagt agaatctgac        960
agaataagac agagacactg aaaataaagc cctagaaagg aagaaattgg aagcaaagaa       1020
aaggagaggt gaaaagataa aaagcctcct tcaaggttag gttcaggttc tgttttccat       1080
ttaacctcat gtgccataaa gctgcccagg cacaccagag ccacatcctg aacccgaccc       1140
tccctgcgaag tgctgctctg ccagtagcaa gccccacatg gaggaagctg ggcccatttc       1200
tggccacttc cacccatttg gagctttgcc agaggagtcg tctatgccaa taatattttct       1260
gcaacagcat attatattat ttgaagatta gtagatcttc ttgggggggk tggggcaggg       1320
gacagtttct atagatgaag aaccagtgtt ggttgtacag ctgttggggg tcatctatcc       1380
catgtgaagc tattcttttt ccaaatcttg ttgtttctgc atttgtgtcc tccaccactc       1440
ccttcttggc tgacatagat atgcctgcca gattktcatc aagggtcata tttcaataaa       1500
aggtgctaag gacaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa       1560
aaaaaaaaaa aaaaaaaaaa agggcggccg ttttanagga tccaagntta cgtacncgtg       1620
c                                                                      1621


<210> 15
<211> 1420
<212> DNA
<213> Homo sapiens

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gagaagaagg tcttcatcag cctggtaggc tcccgaggcc ttggctgcag catttccagc        180
ggcccatcc agaagcctgg catcttattc agccatgtga aacctggctc cctgtctgct        240
gaggtggat tggagatagg ggaccagatt gtcgaagtca atggcgtcga cttctctaac        300
ctggatcaca aggagctgca gctggccggg agctgttcat gacagaccgg gagcggctgg        360
cagaggcgcg gcagcgtgag ctgcagcggc aggagcttct catgcagaag cggctggcga        420
tggagtccaa caagatcctc caggagcagc aggagatgga gcggcaaagg agaaaagaa        480
ttgccagaa ggcagcagag gaaaatgaga gataccggag ggagatggaa cagattgtag        540
aggaggaaga gaagtttaag aagcaatggg aagaagactg gggctcaaag gaacagctac        600
tcttgcctaa aaccatcact gctgaggtac acccagtacc ccttcgcaag ccaaagtatg        660
atcagggagt ggaacctgag ctcgagcccg cagatgacct ggatggaggc acggaggagc        720
aggagagca ggatttccgg aaatatgagg aaggcgtttga ccctactct atgttccacc        780
cagagcagat catgggggaag gatgtccggc tcctacgcat caagaaggag ggatccttag        840
acctggccct ggaaggaggt gtggactccc ccattgggaa ggtggttgtt tctgccgtgt        900
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tcaacggcaa gattgtgaca gactacaccc tggctgaggc tgacactgcc ctgcagaagg       1020
cctggaatca gggcggggac tggatcgacc ttgtggttgc cgtctgcccc ccaaaggagt       1080
atgacgatga gctgccctcc ttctgaagtc caaaggggga aaccaaattc accgttaagga       1140
aacagtgagc tccggcccca cctcgtgaac acaaagcctc ggaccagcct tgagagaggc       1200
cacactattc ctttcctctg gcccagtgaa tttggtctct cccagctctg ggggactcct       1260
tcctgaacc ctaataagac cccactggag tctctctctc tccatccctc tcctctgccc       1320
tctgctctaa ttgctgccag gattgtcact ccaaaccttta ctctgagctc attaataaaa       1380
taaacagatt tattttccag cttaaaaaaa aaaaaaaaaa                             1420


<210> 16
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<211> 1035
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (55)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (110)
<223> n equals a,t,g, or c

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attaaccttc actaaaggga acaaaagctg gagctccacc gcggtggcgn ccgctctaga      120
actagtggat cccccgggct gcaggaattc ggcacgaggt taccccctct ctttcagaaa      180
aaagtgctta aatttaataa aaaatacag acttcctctc tctctgacct gtttctgcac       240
ttctaatttt gtcccattgt tatatctcaa ttctgaaaca agtcccaaac cttttttgtac     300
actcaggctt ttattattta taggtgtctt taatgtggtt tcgctgtttt ttgcttattt      360
tcgtgagcag tgtgactttg acaggtgact ttagaaacat gaagaagcca agcagcctgt      420
gcctctttag acagggcttg atgtctgctt ctgaagttag tggcagcgga agtggagaag      480
gggactgaaa ggtatcttta aattcgraat tatagaaagt aaaaactggt agatgtgagg      540
acagtgggga aactaagatc atagtcgcct aaggttctgt taatacttga gttgaccagg      600
ggggctggtt atgacattga tcatgctaaa ggaaaagatg ccaggaatga gctggggcag      660
agtgaattgg gcagccttcc atcttgacag cacaccaaaa tgtataaatt agcaaaagcc      720
catctttccc taatgccact aagctgtcag tttctggaat tatcatcatt attarattca      780
taatggtttt aataaggtg tcatccaaac tgacactttg aaaataaagt gagatgatgc       840
ctaaattgga ggcttggaat gaccttagaa aactgctcca ggaaacttga gaatgtccca      900
attacttaaa gaactctgag tcagctacat ggctcattcc attcatttgc tttgcattgg      960
agagatttat ttggattgac acaggttcat gcctcccaga aggctccacc taaaccatca     1020
ctctgctttc tcgag                                                      1035


<210> 17
<211> 858
<212> DNA
<213> Homo sapiens

<400> 17
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gatacaagac tcaaaagaac cataggggagc tgagaatgtg tggtatcatc gcccagggaa    120
aaagccgttg gcagctgcat tgttatccag ggatgaaaag ttagcctgta tttgcctga       180
gggacgtgat ttgccctgt agtacctgt gcctgctttg tcattccagc tgcaggttgg       240
catgctccaa cagcatcatg gacgggggct acacctacgc cgaggtgacc aatgtctcca     300
actgttggat ctgcacaact cttccagcag cagctgggga cagcttgttc tggcacgtgc     360
atccagcttc tatgcagaag tggacatggc tagagacttg gggtcctgca gacaacaggt     420
aggatgcaac acggtgagct ttgaacaggg gttgtcgcag aacccatggc aagcctgccc     480
cctggctgac cttgtagtgtc catgatggat gagcttggct aatgggagaa catgtagtgc     540
ccccattgca ggtaccataa tgtatagagc agcactgtgg taaagtcacc gtaagatggt     600
tgcctgctga ggtttgtgca aacaaaaacac atgtcaccac aacaagggtg cggtggaaca    660
agcagacttg ccaaggctgg ggccccacgg attttgtgcc cctggggagt ttatgggtct     720
gtggggacac agaatggcaca tctctgccag ccaattggac tggacgttgt acctggaggt    780
ggccctatgt ggctgccact gtgcttccca cctcgtgccg aattcgatat caagcttatc     840
gatacgctcg acctcgag                                                    858


<210> 18
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<211> 881
<212> DNA
<213> Homo sapiens

<400> 18
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gtctcaccac tgcactctag cctgggtgac agaatgagac cccgtctcaa aaaaaagaa      120
gaagtagata atctgaatag ccctatatct atagaaactt aatagtgctg ggagatatag     180
gtattattat cctcatttta cagatgtgaa aattgaggct cagagaagta aagtctactg     240
ctcaaggtca tgtggctaga atatggcaga gccatgattc agatccaggt cttctgattc     300
ttattccagt gtccttccta gcataccatg ttgcctctaa agattgcagc tccttattta     360
ctagaaaatt gttcctgccc aatctacatc tccacctcac cccatctttt cttaagcact     420
atgttgtgt ttttatcagt attatattca ttgtctttcgg aatacatgtt cttgtttgtg     480
tttgaaaaa aaatctcttt taccagcttg cactcggacc aacttggaaa aaaaaaagct     540
taaatgtttt tgcatgtac agtttaaaaa tgtgaagttt gtagcttaa ctttttgtaa     600
gaaaatctaa taacactggc ttaagtgctg acttgaaatg ctatctttgta aggttcggat     660
gtaagtaatc aattgaggtc agcagtttgt atgagacata gcttcctcca ttgcccccac     720
tccttcttc tttcttaagt ttgagatgct tcctgtgtt ttatgttaga atgttgttc     780
tcctccttt cttcttccta tacctcatca cgtttgtttt aaataaactg tcctttggac    840
cacaaaccct taaaaaaaaa aaaaaacaaa aaaraaagaa a                         881


<210> 19
<211> 613
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (602)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (603)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (606)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (607)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (608)
<223> n equals a,t,g, or c

<400> 19
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tttgtttat tttatccggg ttcatttttt actcttccca tgtacatgaa acaggtggtg     180
gcgtgtagag atcagctgat ccttgtttta tggttaattg aactacttttg tacccagggt     240
ttctgcaaat ccaaaagtga tttttcatct aggatctatt cctaacagtc tactccaatc     300
ccacttttagt tttccacaat tttaaatctt aatagtgaga attcaaatga aagtccatttc     360
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atttgactat tctgatgaca tgattgtggc agaataaatt gggtcttaaa atgccctaga      420
aaatggtaaa tgattaaaaa taatatttta aaattcaacc aaagaaatgg cccattggcc      480
aggtgtggtg gctcacacct gtaatcccag cacttttgga ggctgaggcg ggtggatcac      540
ctgagctcac gagtttgaga ccagcctacc caacatggta aaaccccatc tctacaaaaa      600
annaannnaa aaa                                                          613


<210> 20
<211> 571
<212> DNA
<213> Homo sapiens

<400> 20
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tttggtggct ttacctgaca ccagtcactt cagagactgt tgtgacggag gtttttgggtc      120
accggtgac tttgccctgt ctgtactcat cctggtctca caacagcaac agcatgtgct      180
ggggaaaga ccagtgcccc tactccggtt gcaaggaggc gctcatccgc actgatggaa      240
tgagggtgac ctcaagaaag tcagcaaaat atagacttca ggggactatc ccgagaggtg      300
atgtctcctt gaccatctta aaccccagtg aaagtgacag cggtgtgtac tgctgccgca      360
tagaagtgcc tggctggttc aacgatgtaa agataaacgt gcgcctgaat ctacagagag      420
cctcaacaac cacgcacgaa acagcaacca ccaccacacg cagaacaaca acaacaagcc      480
ccaccaccac ccgacaaatg acaacaaccc cagctgcact tccaacaacc aaaaaaaaaa      540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a                                       571


<210> 21
<211> 2024
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (540)
<223> n equals a,t,g, or c

<400> 21
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tggaaaacct aggtacccat aagaaaaaag attcattctc tgtgaaaact gtaggaatct      120
gttgttgttt tcatttgaat atgctctact tctgctctag tatttggttt ggaatatatt      180
ttgtggctct aattactgta tttttaaaaa ccctacctcc attaacagtt ggtaaaggcc      240
cctttcagg aaagtttgtt gctttttttt tttttttaaa ggaaagctgc tcttttgctca      300
gtatagcgtt ttgaaagtga acatagtaac aaatacttta aaaataaagg atacacaatt      360
tatatttgaa aataaaaact ttctgctggt gggatcattt atagtcctttc attttttaaaa      420
aaaatgtttc ccttttttata ttgctcttga aagtttaatg agcagaatac aatactggtt      480
ataataaaa tatggtaacc acacagtact cagccttca atatgttttg ggtcaaactn      540
catttaggca ctagcattta gaaaaatacc aatcacagtg atgctttggt tatttaatat      600
gaaggaaatg gaactaaaac atttatgtca tcaaatttat ttcactcctt tatatttgac      660
tggctggttg atacataatg gttgatgaac atatatttgc ttaaatcact aataggatg      720
gttgtaaagt aaatagatca ttggttcaac catttaagtg tttttgccag attgtcaatg      780
aaaccatcat actgaccttt tcctccaaaa ttgccaaatt gactgaactg gttgggtgtc      840
tgttaaaatg aavtcaactg tgtgactaaa aagtcagacg gttgccatat tgtttggaat      900
atgttgaatg tcagtgtatg ccttatgtct ttaattgggt atgcaaaaaa attttttactt      960
aagtagatta aaatttttaac ctctagcatg aaaacccagc accaacactg aaagactcca     1020
ttcaggttga agtagcctca aacagtaact tacttttttga taataggctg ctgtttttct     1080
taaataagct taaaacaatt ctatctgaaa ttggtagcat gggttcactt ggctacaact     1140
gagcaaaata ggtagcactt tcttttaatg gggtgctgcc tctttaggac tgactgtact     1200
atccactgac actggtttgg cagttggtac tgctgaacat ttttatacat gctaccatga     1260
agctatatat gttagtattg aagaagctaa cgggtatact atcattttgtg atgtgtgggc     1320
tgattataat ttcctgtcatt tcctgtacat tgggatgaaa ctactttagc aaagtccaca     1380
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gatcagaaac cagacggtag tttttgaagt tgaaaccagc aaaataagaa aaaataaaaa    1440
atcgatttta attttctgcc tctttcccaa attacccttc ccacttgctc gacaaaccta    1500
tgtaaagcag tttgtttttt catgtttta   ctttaccttg ccctgtgtta tggtactggc    1560
tgacatgtct aagactggat gtgtatattt attatggtgt ctaaaaatca cgaagctcat    1620
cacttttcag gagtatagat aaaatcaaat tggtagtaca tcagagttac ttttcagtgc    1680
accatgacat cactaaaatg agtgctgtaa tgttacaggg ctttcaggtt tgtaaaaaca    1740
taaccataaa ttatattgac gtcagatatg agttgagtat ctataaaata tcacgtgtat    1800
cccaaaatat tggactgctg tttgactgga tattgctgca taattttctt ctattgtccc    1860
atatcctttt ggagagagat ttaatgggat ttgaaatgtg caagctgtct aaataagatg    1920
cagtcaaata aagtatggtt aagttgtgtt tgcattтttc ttttagatac agctgtgtgc    1980
attttatgat tgggttggtt tgctttttacc tactaagtaa aaaa                    2024
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<210> 22
<211> 575
<212> DNA
<213> Homo sapiens

<400> 22
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gaattcggca cgagatttgt gaggcctcag ctcacaaaac ctgaatcagg gtccaacagc      60
atctgcctgt ttttattctg caaagctgag atcaagttaa aaggatgatg ataatcactt     120
gtttatctat tcactcagca aacacttatg ggacatttac tgggtgccag gtcttgagct     180
gggcactgag atgagaagct gcctgaggca tgatggtccc atcccactgc cctccagggc     240
tcaaaatact ttatagttta caaagtgttt tcacatgcaa tttgtgagc tgtgggtgcc     300
attattatcc acattgctta atacatggca gaacctgacc ttaggttgtc caagtccaga     360
ttctaagtcc aagtccagtc cagatcctag agcctgtcca ctcttctctc ccttcctctc     420
tttcttcctc gttagttctt tctttttctt ttctctcttt ttctttctct ctctttcttt     480
ctttcttcct ttcttctttc tctttttctt ccttctctct ctctctcttt ctttttttca     540
agaccctgtc caaaaaaaaa aaaaaaaac tcgag                                575
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<210> 23
<211> 1181
<212> DNA
<213> Homo sapiens

<400> 23
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ggcacgagtc gccatctacc ctcctagaata aagaaatctt atcattcacc gtctaccctc      60
tagagtaaac aaatcttatc attcgccatc taccctctag aatagagaaa tcttatcatt     120
catcatctac cctccagaat aaagaaatgt tatcatttgc catctaccct ctagaataaa     180
gaadtcttat taaggacatt ttcaaagcct taacagaata tgaatgatta caatattatg     240
ttttacctat acagcatctt ccaagttcta gtttggttgt gccaggccaa acatttgagc     300
cagatttcgg caagatcaag caggagactc tggcgtctgt cgctgattac cttcccgcca     360
tacctggcca ccagcctttc ccatggaccc cacgtgtgtc tccagactct tgggtatgaa     420
tcctgtgaac acactgacct ctgctttcta catgactgac aagcactatg aaatttgcat     480
aaatatgaat agaaaarata ctgtccccac atccctaaa ataaaactga gtcctcaccc     540
atgggctttt gctggattat actaagaaaa aggcaggtct tacaacacac attcccatag    600
actcacatcc cagagaagat tccttccaca ggctcagggt cctgaacaca ctgctccact     660
ctcagggctc ggagacactc tgcaggtggg tcttcacccc atccgggagc cctaattcct     720
tcttcctcag tttttcatac agtgattttt cccagtactg ctgtctactt tcctctgcca     780
gaaattcctt gctggatcca tggcaatctc ccaggactc ctatttcata aaatgggaaat     840
ggaattcttc atatgcctta aaaagtaaaa taattatcca aacaatataa aatacaaaca    900
cccatctagc aaaatatttc ttagtacatc atgaattcaa atatatatcg tacaaaatga    960
ctgaggattt tattaatttc gagcaatatt gaggtttct cataatatct tttattgtt     1020
aacttcaaac taaataacaa tcatgtctgg gaataaaatg tataagatag tcatttagaa    1080
aaatttggag atttttcctt ccttgtccag taaatactta acattttacg tgcaatgtat    1140
gtcataaaata tgggcattcc cccaaaaaaa aaaaaaaaa a                        1181
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<210> 24
<211> 2290
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (525)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2196)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2254)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2256)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2274)
<223> n equals a,t,g, or c

<400> 24
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ggaggtgtgc gtgcacatgt atgtttgtgt ttcaggtctt ggaatctcag caggtcagtc     120
acattgcagt gtgtcgcttc acctgnctcc ctcttttaaa gattttcctt ccctctttcc     180
tgcattagtg tcctggatc ggcttaatca ctgctcagaa actgccttct gcccactgga      240
aagggaggca ggggaaatac atgattctaa ttaatggtcc aggcagagag gacactcaga     300
atttcaggac tgaagagtat acatgtgtgt gatggtaaat gggcaaaaat catcccttgg     360
cttctccatgc ataatgcatg ggcacacaga ctcaaaccct ctctcacaca catacacata    420
tacattgtta ttccacacac aaggcataat cccagtgtcc agtgncacat gcatacacgc     480
acacattccc ttcctaggcc actgtattgc ttcctaggg catcttctta taagacacca     540
gtcgtataag ggagccdacc ccactcatct gagcttatca accaattaca ttaggaaaga     600
ctgtatttcc tagtaaggtc acattcagta gtactgaggg ttgggactc aacacagctt      660
tttgggggat cataattcaa cccatgacag ccactgagat tattatatct ccagagaata     720
aatgtgtgga gttaaaagga agatacatgt ggtacaaggg gtggtaaggc aagggtaaaa     780
ggggagggag gggattgaac tagacacaca cagacacatg agcaggactt tgggggagtgt    840
cccctttcttt ctataagtgt gtgtgtgygg atatgtgtgc tagatgttct tgctgtgtta    900
ggaggtgata aacatttgtc catgttatat aggtggaaag ggtcagacta ctaaattgtg    1020
aagacatcat ctgtctgcat ttattgagaa tgtgaatatg aaacaagctg caagtattct    1080
ataaatgttc actgttatta gatattgtat gtctttgtgt cctttttattc atgaattctt   1140
gcacattatg aagaaagagt ccatgtggtc agtgtcttac ccggtgtagg gtaaatgcac    1200
ctgatagcaa taacttaagc acacctttat aatgacccta tatggcagat gctcctgaat    1260
gtgtgtttcg agctagaaaa tccgggagtg gccaatcgga gattcgtctc ttatctataa    1320
                                                                     1380
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tagacatctg agccctggc ccatcccatg aaacccaggc tgtagagagg attgaggcct    1440
taagttttgg gttaaatgac agttgccagg tgtcgctcat tagggaaagg ggttaagtga    1500
aaatgctgta taaactgcat gatgttgca ggcagttgtg gttttcctgc ccagcctgcc    1560
accaccgggc catgcggata tgttgtccag cccaacacca caggaccatt tctgtatgta    1620
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cctattgaag ttaatagggg ttcagcacaa cactgggtcc caggcatgca gccttgtctt    1800
tttatgtttg tcctcatggg catcatgtgg cacacaggga tcttacccaa aatcatgcct    1860
agcaggaaga gatgcctctc tattgatatt ccagctgccc cacaagcagg tatgtgccta    1920
ctcattctct gacatgtgtc ctaggtttct tgactgtaam attccgctta ataaataatg    1980
tattgagcac ctgctatatc cagagctctg ctgggcactc tggaagatta gagtttgaag    2040
aacacacaat cgttgtcctc cagaagttca tggtccagta gggagagaag gtcacaaaca    2100
gccakaatct acaagatgag aggggctatw aaagagagct gagaagagtt tcagagccac    2160
tgagaagata ctcattttag tcctggtaac gggaancttt ctggagttgg tggcatttaa    2220
gatgaaccac aaatggagca ggaatttaat gaanangaaa ggaccaggac gtcnaataga    2280
ggacacagca                                                          2290
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ggcagagctg gcttgattga aggaaagctt gaaaaggcgc agagccctat acctcatttc      60
ctccatgata aaaggatcca agtgaggccc tgtcacagcc tgtgggtagg ggatgcggcg     120
ggatcctcat tgccatggta ctcaaaggta gaagagcctg gagtttgttg cttctctttg     180
ctattcttc atatcctctt gggcctggtg attaattagc aattctcatt ccctcagcc      240
aaaggcctgc actgggcttt atttgtcttt tttattttt taagcactgc ctgccagaga    300
tgggcctggg gcctgatgag gacccttagcg ctgctcgttc tcctttttctg ttcatgccac   360
cattcctcca tggggtgggg aaggcaggca tggggtgtgg ccctcggaga agttaggagt     420
cccccagctc aagatacagt ggcaaagacc tagtggtccc ctacccccac ttctctcagt     480
tcctggcatg aggagagaag accctgctct ggtggagctg acaaccttg aggctgggag      540
gagagcagcc tctgggcatc gttcccagtcg tccctcacac taaaacggcg tagatggcaa    600
cccccaccc ccacccccgct gctcaactct tgtgtttgtt gttctgtttg ccccatttat     660
ctgttgctgt ttttgtgttg tcttcccctg tccgcatttt gtaaaatggc ccctgggggga   720
gtgtttttgc tggatctgct cccttttcgct ctctcactcc actacttttt ggaacaaagt    780
gatggcagaa tgcggtggtg gtgggggtct tttgtactgt tggattaata aaatgattt     840
aaaatcccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa a             891
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actagtggat ccaaagaatt cggcacgagc ccagggaagt taagcaactt gcccactcac      60
tcagtctaat tggtgccggg gcagggacag aactcactca attccactgc tttccccagt     120
ttctggtgag tgatgtgtgc ctggcactgt gtgcacctgg cactgtgtgt agtaggaatg     180
ctgtttcttc tgtctgtaac ctcctcccag ttctgtaaac aaagacaaaa ccatgccctg    240
cccttaaagc ctatagggtt caaatgccac ctctttgatg atgctttccc tataacacaca   300
tttgatacct ctcatgggac ttagcaagta attgcaacga gaggcatata tgttagttca     360
atatagcaaa cctttgttga gggcccactg tgtgccaggt atgtctcccc tccctgagga    420
ctggaagcaa aaaaagaaa gagaaaaaaa aaaaaaaaa aaaa                       465
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<212> DNA
<213> Homo sapiens

<400> 27
ggctcttttg ggtttatact gggaatttat ttttactaaa ttatttaact tttctaatta        60
tgtaattatg taagctagct tttcatgttt atgtatgtat ggtgtcccct tgtgttattt       120
ttcttcctct tggttttttga attagtgtta aatagaatac tgtctggact cttaaaatat      180
tttcatttcc atcatggtta taacaaattt gctgcatgcc caaactgaca acagcaatca       240
ctgagggaac aggtttttgaa tctttctttt gtgttatgaa gtttatcgtc tctacttgct      300
tgagattttt gttatttttgg gggtttgggg gtgcttttttg ttttgttttt gccaaatgta     360
acatgaaagc agatgctgca gcttttagtct gttatgctga tttagtaaaa aaaaattttt      420
tacatatatt gcttgctttc gatgcttctg tgaaattttt tyctaaagct tttgtgtcagc      480
tgtatggtaa aaatatggkg attaattkga agagcttaca ttgaaagaca atgtaatagg       540
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ctgaaaaaca gtaacatagc attttgaaat ataattttta aaatattgat gctttccttt      660
taaatggaaa tttaaawttt atgattaaaa gtttaaacat twatgataat tttcctcatc       720
agttctccca taggaaataa agcatgtgaa agggtaaaaa aaaaaaaaa aaaaaaactc        780
gag                                                                     _783


<210> 28
<211> 470
<212> DNA
<213> Homo sapiens

<400> 28
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caagattctc ggtgcctatg tgtaagagtt cacgccagta cacgtataca tcagtgcata       120
tgtgtcagtg tgcgtgtgag cgtgtagagt ggaggggggtc actgacacca gccagggcgt      180
tgcataacca cctgacagag caatggtttc cccatggctt cccttcttg tctcgcttttt       240
tcacttactg aattgtctcc gcggtgttgg cacgtctggc cagagcctgg gactgccctc        300
ctcatccttc ccaccaacac cagagcacaa ggccactgcc cgtgactgaa ccacagggat       360
gctgcacacg tccaggggatc ctgtcctttc ccttccttttg taagagtgtc ccagcctcct     420
gtcccctaca ctcagaccaa actgttccat ggtggtgact ccagccctga                  470


<210> 29
<211> 1321
<212> DNA
<213> Homo sapiens

<400> 29
ggcacgagca ctgagctcta atcactaacc aggcacttgt ccagtcctgg tgggtaggat         60
aagagggtat ggaagtacat ttacctccct gcaggatctt ggaaggaaaa tgattgggac       120
cagagtaaatc agtggagaaa aagaactaga caaactgtaa tcaggggagtc ttgctgctac      180
aggaggtcat aggaggaaag artcaaagca tgtggtgttg gttggaaata attaaggagg       240
gcttcctgcc caatatggtc taaggatgga aaaacttttgt atctcccagt ttgtctttct       300
tttctccata gccctgcctc tacttttcctt ccttggaatc aggggttcct tagcccattt      360
gctttctctca ccttggggac cccaggggcc aagcagttct ccatctagtc acaccaaagg       420
caaaaagcct ggctacctcc cccctagcac gtgagtccct actcccctcc cctctgtttc        480
tgcccagctt tgcttatttt ggggatttca aggcagcaga gggtartgak agtaagggga       540
gagcaggmga agsctctgtc ctgtataggc aactgcmtga ctatgcggtg cactagctgt        600
aarccaagat caggtgccca gycctttttg tccattaaca ccccttcttg atctttcaaa       660
ggcagctaat tgctagcaaa tccccccgat tccggtcctt ttccctctat ttctttgtta       720
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gttgggtcct tggagcccccc tgtttgttgt tttgtgttgt ttcaatgaa aagcaagttt       840
accctcagag ttatgctttt ccaaagaggc tgatgtctctt gttttttgttt tttttaaatg      900
tttccagggt tctaaagtga aagtgaagtt gggggaaggggg gtttgggagt gttaagtaat       960
ccaaggttta gaaacacccca tgagatagtt accctgatc tccagtccct agctgggggc       1020
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tggacagggg gaagggagag aggatttcta ttcacccttta atatattttt acaaaaaaag      1080
caaacaattt aaaaacaagc ccaccgcttc tgtacatgtc taaatatatt tttagaagtg      1140
ggtaggattg tgaattctg atgcagggcc tttttataaa taggttaggg tagcatcatt      1200
cagacttctc tgttgttttt gtccctgtct ttttcttatg ttgtgtact aatgtaattc      1260
atatttttt tagatcctcc ctttcctata gagataaaag tgatttatct tggcaaatta      1320
t                                                                     1321


<210> 30
<211> 620
<212> DNA
<213> Homo sapiens

<400> 30
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tggtcagttt atgcagtggg ctcccaagct catgtctcct tcttggatcc acggcagcca      120
tcatacaacg tcaagtctgt ctgttccagg gagcgaggca gtggaatccg gtcagtgagt      180
ttctacgagc acatcatcac tgtgggaaca gggcagggct ccctgctgtt ctatgacatc      240
cgagctcaga gatttctgga agagaggctc tcagcttgtt atgggtccaa gcccagacta      300
gcaggggaga atctgaaact aaccactggc aaaggctggc tgaatcatga tgaaacctgg      360
aggaattact tttcagacat tgacttcttc cccaatgctg tttacaccca ctgctacgac      420
tcgtctggaa cgaaactctt tgtggcagga ggtcccctcc cttcagggct ccatggaaac      480
tatgctgggc tctggagtta atgacaactc cccaaatgca gagatttcac taacttccaa      540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      600
aaaaaaaaaa aaaaaaaaaa                                                  620


<210> 31
<211> 1222
<212> DNA
<213> Homo sapiens

<400> 31
aattcccggg tcgacccacg cgtccgagcc cagcaacgtg caagggaaa ggggacagga       60
ttctggatgg ccatttgctt cactggggatg caaaacctct tttgagtact agaatcagta      120
tttcttcttc catctctgct gtacctgaga agaaatggcc aaacgcacct tctctaactt      180
ggagacattc ctgattttcc tccttgtaat gatgagtgcc atcacagtgg cccttctcag      240
cctcttgttt atcaccagtg ggaccattga aaaccacaaa gatttaggag gccattcttt      300
ttcaaccacc caaagccctc cagccaccca gggctccaca gccgcccaac gctccacagc      360
cacccagcat tccacagcca cccagagctc cacagccact caaacttctc cagtgccttt      420
aaccccagag tctcctctat ttcagaactt cagtggctac catattggtg ttggacgagc      480
tgactgcaca ggacaagtag cagatatcaa tttgatgggc tatggcaaat ccggccagaa      540
tgcacagggc atcctcacca ggctatacag tcgtgccttc atcatggcag aacctgatgg      600
gtccaatcga acagtgtttg tcagcatcga cataggcatg gtatcccaaa ggctcaggct      660
ggaggtcctg aacagactgc agagtaaata tggctccctg tacagaagag ataatgtcat      720
cctgagtggc actcacactc attcaggtcc tgcaggatat ttccagtata ccgtgtttgt      780
aattgccagt gaagggattta gcaatcaaac ttttcagcac atggtcactg gtatcttgaa      840
gagcattgac ataccacaca caaatatgaa accaggcaaa atcttcatca ataaggaaa      900
tgtggatggt gtgcagatca acagaagtcc gtattcttac ctccaaaatc cgcagtcaga      960
gagagcaagg tattcttcaa atacagacaa ggaaatgata gtttgaaaa tggtagattt     1020
gaatggagat gacttgggcc ttatcagttt ttcattcagc aagtctgcac tagggaccta     1080
ctatgagcca cgcaatactt ccttggaatg atgtattccc tggccttgaa ataaggaatc     1140
tagtacccat gtttgtgcta ctggaatgaa tccattaaac tctctgagac tcaaaaaaaa     1200
aaaaaaaaaa aaaaaaaagg gc                                              1222


<210> 32
<211> 829
<212> DNA
```

<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (772)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (829)
<223> n equals a,t,g, or c

<400> 32

```
aggtcaaaaa taataataaa tgttagcatc tnactcagtt ctgtgtgatc cagctcctgc        60
caacccatct gatgagctcc tggttcactc tccttgcttc ctgctttcac ctcctgtggc       120
ccctgtcccg ttcttcccat gtgccaagct cattccagcc cccagacctg tccgctactt       180
ttctcctcca gatcttaggt taggtaacac tccagccccc tctgagatca cctacacacc       240
ttctgttcac ttctgtcatc ctattgctaa attacttttgt ctcaaggttc gtaatctctg      300
tgagggagtc ctctctgctg cttttcccaa ggcctgacgc acaccgggca cccagtttaac      360
atctttaata tattgggctt tcgtgctacc tgagggcttc tagaaagctc tctacatcca       420
agtgagaggc tggctctcca ggaggtacct gtgctctcag cacaaatgga gcccctctgg       480
gaacaggaac ctgcttcagc cctttagcat acacaggcct gccacatgct ggggacaggg       540
ccacctgagt cccttgcctg gtcccatgtg tggtgccagc tccctcccct gatgattgtt       600
ctctctcttt cccaggaccg agatctcact cagcagacag cagcagcccg ggagcctgag       660
ctcaggagga actcttacct ggaaattggg aactgtatgg agactccaaa ctgacttctt       720
tcaaaaaaaa aaaaaaaaaa atttttttag ctttgacaaa cacacaaaag tngtaataaa       780
gagagccctc cttgtcaacc caaaatgtga gcccctgtg gaaaaccan                    829
```

<210> 33
<211> 1336
<212> DNA
<213> Homo sapiens

<400> 33

```
ccacgcgtcc ggagttccac aaaatttgtt agtcatcaaa taatagagtt tttcttaagt        60
gaccacttac atactcatct acaataaacc ccaactaact aattttttcac tttgtgtacc      120
tcatgctaat atccgtggac agtaatgtgc ctgttgtgtt ccttttgctt ttcatccttg       180
tgatcttatg tcacatggaa tgtaaaggcc acatatatat atgtgtgtgt gtgtgtgtgt       240
atatgtatat ttttaagaat atttagtctg gatttcatga aattgacttc tgaaataatt       300
tgcctcaatt ttgtttcctg gtggtttgag aagaaagttc ctgtggtgaa atgaaaaggg       350
gataaaggga agtacttatt ttaaaacata agtaacttgt ggattgttga atactgtgaaa      420
aagagtgtta cttccccgtt aacctacgcc tcgtgtaatc cttcaggttg gaagtcggaat      480
cgcagaccgt gtatatgaca taccctgaaa tttcccctt gctttggatc ttggttgtgg        540
aagaggttac attgcacaat atttgaataa gcttcagtta ttccattgca ggaaactatt       600
ggaaagtttt tccaagctga cattgcagaa aatgctttgt ttgcattggg tgaatgacct       660
tcctagagca cttgagcaga ttcattatat tttaaaacca gatggagtgt ttatcggtgc       720
aatgtttgga ggcgacacac tctatgaact tcggtgttcc ttacagttag cggaaacgga       780
aagggaagga ggattttctc cacacattct tcctttcact gctgtcaatg acctgggaca       840
tctgcttggg agagctggct ttaatactct gactgtggac actgatgaaa ttcaagttaa       900
ctatcctgga atgtttgaat tgatggaaga tttcacaagaa caaaagtcca gaatgttgac      960
ctaatttttac aaaacaagct gcatatcagc tgatgaatgc atgagaaatt ttcaaggctt     1020
tcacagtggt cttaaggtat gggtgagagt aactgtgctt ggaatagaaa agccctgctg      1080
catcgagaca caatgctggc agctgcggca gtgtacagag aaatgtacag aaatgaagat      1140
```

```
ggttcagtac ctgctacata ccagatctat tacatggatag gatggaaata tcatgagtca      1200
caggcaagac cagctgaaag aggttccgca actgtgtcat ttggagagct aggaaaaata      1260
aacaacctta tgccaccggg gaaaaaatca caataaatat ttattcagtg ttaaaaaaaa      1320
aaaaaaaaaa aaaaa                                                       1336
```

<210> 34
<211> 1635
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> n equals a,t,g, or c

```
<400> 34
tcgacccacg cgtccgcagc tctccgtgga caatgggctg tggcgtgtga ccctgtgcat        60
gctggccttc ccgctgctcc tcacnggcct catctccttc agggagaaga ggctgcagga       120
tgtgggcacc ccgcgcgccc gcgcccgtgc cttcttcacc gcacccgtgg tggtcttcca       180
cctgaacatc ctctcctact tcgccttcct ctgcctgttc gcctacgtgc tcatggtgga       240
cttccagcct gtgccctcct ggtgcgagtg tgccatctac ctctggctct cctccttgct       300
gtgcgaggag atgcggcagc tctctctatga ccctgacgag tgcgggctga tgaagaaggc       360
agccttgtac ttcagtgact tctggaataa gctggacgtc ggcgcaatct tgctcttcgt       420
ggcagggctg acctgcaggc tcatcccggc gacgctgtac cccgggcgcg tcatcctctc       480
tctggacttc atcctcgttct gcctccggct catgcacatt tttaccatca gtaagacgct       540
gggggcccaag atcatcattg tgaagcggat gatgaaggac gtcttcttct tcctcttcct       600
gctggctgtg tgggtggtgt ccttcgggt gggcaagcag gccatcctca tccacaacga       660
gcgcccgggtg gactggcctgt tccgarggc cgtctaccac tcctacctca ccatcttcgg       720
gcagatcccg ggctacatcg acggtgtgaa cttcaacccg gagcactgca gcccaatgg       780
caccgacccc tacaagccta agtgcccga gagcgacgcg acgcagcaga ggccggcctt       840
ccctgagtgg ctgacggtcc tcctactctg cctctaccctg ctcttcacca acatcctgct       900
gctcaacctc ctcatcgcca tgttcaacta caccttccag caggtgcagg agcacacgga       960
ccagatttgg aagttccagc gccatgacct gatcgaggar taccacggcc gccccgccgc      1020
gccgccccc ttcatcctcc tcagccacct gcagctcttc atcaagaggg tggtcctgaa      1080
gactccggcc aagaggcaca agcagctcaa gaacaagctg gagaagaacg aggaggcggc      1140
cctgctatcc tgggagatct acctgaagga gaactacctc cagaaccgac agttccagca      1200
aaagcagcgg cccgagcaga agatcgagga catcagcaat aaggttgacg ccatggtgga      1260
cctgctggac ctggacccac tgaagaggtc gggctccatg gagcagaggt tggcctccct      1320
ggaggagcag gtggcccaga cagcccgagc cctgcactgg atcgtgagga cgctgcgggc      1380
cagcggcttc agctcggagg cggacgtccc cactctggcc tcccagaagg ccgcggagga      1440
gccggatgct gagccggag gcaggaagaa gacggaggag ccgggcgaca gctaccacgt      1500
gaatgcccgg cacctcctct accccaactg ccctgtcacg cgcttccccg tgcccaacga      1560
gaaggtgccc tgggagacgg agttcctgat ctatgaccca ccctttaca cggcagagag      1620
gaaggacgcg gccgc                                                     1635
```

<210> 35
<211> 1264
<212> DNA
<213> Homo sapiens

```
<400> 35
tgggctggaa cgcgccggaa tctgaggtgt gagtagagcc tggggggagag tggatccagg        60
tgaaggggc agaggactgg gagtttctct cctcttgaat aagaactcga caacagagtg       120
ggaactttct gtcttgtgat ccattgcctg gtgagtcaca gctcacacca tggatttaac       180
ctgagagctt caacttctgc tttggcctg gagttcccat gccctggtgt cttctaccag       240
ttcttagtgt gttgcactgg agcacagagg acactcgatc gtgcggccgcg cagggcgggg       300
ggccgccgct gcctccccgc gggatggctg gcacctgtgct cggagtccggt gcgggcgtgt       360
```

```
tcatcttagc cctgctctgg gtggcagtgc tgctgctgtg tgtgctgctg tccagagcct      420
ccggggcggc gaggttctct gtcattcttt attcttcggt gctgtgatca tcacatcagt      480
tctgttgctt ttcccgcgag ctggtgaatc cccagcccca gaagtggaag ttaagattgt      540
ggatgacttt ttcactggcc gctatgtcct gctggctttc cttagtgcca tcttccttgg      600
aggcctcttc ttggttttaa tccattacgt tctggagccg atctatgcca aaccactgca      660
ctcctactga ccactcttca ggaawacgaa aacctgttct ctccttcatt gtgatgacat      720
tgatgagcag gaaggcacta ttcagagcct tgtctttgaca gccctcatgc cttaaggtta      780
gaggagatc tgtccatcac taagacaaat ctctggagtc ctggcttcca gaaacaggat      840
tgccaaattg tccctgtggg gctagattct taccagcgtta agaaggatat tgctatcttc      900
ttagtacccg taccttagga tttccaactg tttgaaagg gaaatagtaa cagtgatctg      960
cttagagtgg attttccactc aagtccttag taagtggatt ttggggaaaa aagcacmtgg     1020
gcttctggtt cttttgata atatataaaa ttattcatta tgaggttgca gttgtttgca     1080
aaggagaggc actcaaattt gaaaggttat tttaatgtga taattggaa gacttactca     1140
gatgttggtc attgaccact ctgtgcatat atttctgcag agctctgtga aggcaatgag     1200
tgtcacttcc ctctgctcta ataaagcaat aaataataaa aaaaaaaaa aaaaaaact     1260
cgag                                                               1264
```

<210> 36
<211> 688
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (607)
<223> n equals a,t,g, or c

<400> 36

```
cccacgcgtc cgggtcccga tgagcctcct gttgcctccg ctggcgctgc tgctgcttct      60
cgcggcgctt gtggcccag ccacagccgc cactgcctac cggccggact ggaaccgtct     120
gagcggccta acccgcgccc gggtagagac ctgcgggga tgacagctga accgcctaaa     180
ggaggtgaag gctttcgtca cgcaggacat tccattctat cacaacctgg tgatgaaaca     240
cctccctggg gccgaccctg agctcgtgct gctgggccgc cgctacgagg aactagagcg     300
catcccactc agtgaaatga cccgcgaaga gatcaatgcg ctagtgcagg agctcggct     360
taccgcaagg cggcgcccga cgcgcaggtg cccccgagt acgtgtgggc gcccgcgaag     420
ccccagagg aaacttcgga ccacgctgac ctgtaggtcc ggggcgcgg cggagctggg     480
acctacctgc ctgagtcctg gagacagaat gaagcgctca gcatcccggg aatacttctc     540
ttgctgagag ccgatgcccg tccccgggcc agcagggatg gggttgggga ggttctccca     600
accccanttt cttccttccc cagctccact aaattccctc ctgccttaaa aaaaaaaaa     660
aaaaaaaaa aaaaaaaaa aaaaaaaa                                        688
```

<210> 37
<211> 1516
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> n equals a,t,g, or c

<400> 37

```
ttcacgtgca cactgatcac aacgtcacgc ctgncagggc accggtccgg gaattcccgg      60
gtcgacccac gcgtccgcag gagaggtgtc tgtgcgtcct gcacccacat cttttctgt     120
cccctccttg ccctgtctgg aggctgctag actcctatct tctgaattct atagtgcctg     180
ggtctcagcg cagtgccgat ggtggcccgt ccttgtggtt cctctctact tgggggaaatc     240
aggtgcagcg gccatggcta cagcaagacc ccctggatg tgggtgctct gtgctctgat     300
```

```
cacagccttg cttctggggg tcacagagca tgttctcgcc aacaatgatg tttcctgtga        360
ccacccctct aacaccgtgc cctctgggag caaccaggac ctgggagctg gggccgggga        420
agacgcccgg tcggatgaca gcagcagccg catcatcaat ggatccgact gcgatatgca        480
cacccagccg tggcaggccg cgctgttgct aaggcccaac cagctctact gcgggggcggt        540
gttggtgcat ccacagtggc tgctcacggc cgcccactgc aggaagaaag ttttcagagt        600
ccgtctcggc cactactccc tgtcaccagt ttatgaatct gggcagcaga tgttccaggg        660
ggtcaaatcc atccccacc ctggctactc ccaccctggc cactctaacg acctcatgct        720
catcaaactg aacagaagaa ttcgtcccac taaagatgtc agacccatca acgtctcctc        780
tcattgtccc tctgctggga caaagtgctt ggtgtctggc tgggggacaa ccaagagccc        840
ccaagtgcac ttccctaagg tcctccagtg cttgaatatc agcgtgctaa gtcagaaaag        900
gtgcgaggat gcttacccga gacagataga tgacaccatg tcctgcgccg gtgacaaagc        960
aggtagagac tcctgccagg gtgattctgg ggggcctgtg gtctgcaatg gctccctgca       1020
gggactcgtg tcctggggag attaccccttg tgcccggccc aacagaccgg gtgtctacac       1080
gaacctctgc aagttcacca agtggatcca ggaaaccatc caggccaact cctgagtcat       1140
cccaggactc agcacaccgg catccccacc tgctgcaggg acagccctga cactcctttc       1200
agaccctcat tcctcccag agatgttgag aatgttcatc tctccagccc ctgaccccat       1260
gtctctggga ctcagggtct gcttcccca cattgggctg accgtgtctc tctagttgaa       1320
ccctgggaac aatttccaaa actgtccagg gcgggggttg cgtctcaatc tccctggggc       1380
actttcatcc tcaagctcag ggcccatccc ttctctgcag ctctgaccca aatttagtcc       1440
cagaaataaa ctgagaagtg gaatcttaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa       1500
aaaaaaggcc ggccgc                                                        1516
```

```
<210> 38
<211> 1267
<212> DNA
<213> Homo sapiens

<400> 38
ggcacgagct gcagggcggg ggcggcgcca agcgcaggga gcccggctga gtggcagccc         60
agattgaaga tggatacgtg acaatcccag ggaccgctgc actgacttca tttccttaga        120
caagacacag tgtagggccc ggccgtgtt ggccccagga ctccttggga atatagctgt        180
ggacaatgaa tcctgcgagc gatgggggca catcagagag cattttgac ctggactatg        240
catcctgggg gatccgactcc acgctgatgg tcgctggctt tgtcttctac ttgggcgtct        300
ttgtggtctg ccaccagctg tcctcttccc tgaatgccac ttaccgttct ttggtggcca        360
gagagaagt cttctggcac ctggcggcca cgcgtgcagt cttttggtgtt cagagcacag        420
ccgcagctgt gggctctgct gggggaccct gtgctgcatg ccgacaaggc gcgtggccag        480
cagaactggt gctggtttca catcacgaca gcaacgggat tctttttgctt tgaaaatgtt        540
gcagtccacc tgtccaactt gatcttccgg acatttgact tgtttctcggt tatccaccat        600
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gctatgacca cgttgctcct ggagatgagc acgccctta cctgcgtttc ctggatgctc        720
ttaaaggcgg gctggtccga gtctctgttt tggaagctca accagtggct gatgattcac        780
atgtttcact gccgcatggt tctaacctac cacatgtggt gggtgtgtt ctggcactgg        840
gacggcctgg tcagcagcct gtatctgcct catttgacac tgttccttgt cggactggct        900
ctgcttacgc taatcattaa tccatattgg acccataaga agactcagca gcttctcaat        960
ccggtggact ggaacttcgc acagccagaa gccaagagca ggccagaagg caacgggcag       1020
ctgctgcgga agaagaggcc atagctgctc cagccggggc tccgggtcggg cagcagagct       1080
ggcacaccga ttctgggaag ccccgcgaat gatgggctttt gaattaatga ggcagtgaat       1140
gtttttgtgtt tacttctaag ggaaatacta acttttctttc gcattagtat taattttgaa       1200
gtagctacaa agtattttta agaaattata attttatgac tgtcaaaaaa aaaaaaaaaa       1260
aaaaaaa                                                                  1267
```

```
<210> 39
<211> 2203
<212> DNA
<213> Homo sapiens

<220>
```

<221> SITE
<222> (1246)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1846)
<223> n equals a,t,g, or c

<400> 39

```
ggcacgagcg gaggcgcgcg ggccagcctg ggcccagcc cacaccttca ccagggccca      60
ggagccacca tgtggcgatg tccactgggg ctactgctgt tgctgccgct ggctggccac     120
ttggctctgg gtgcccagca gggtcgtggg cgccgggagc tagcaccggg tctgcacctg     180
cggggcatcc gggacgcggg aggccggtac tgccaggagc aggacctgtg ctgccgcggc     240
cgtgccgacg actgtgccct gccctacctg ggcgccatct gttactgtga cctcttctgc     300
aaccgcacgg tctccgactg ctgccctgac ttctgggact tctgcctcgg cgtgccaccc     360
cctttccccc cgatccaagg atgtatgcat ggaggtcgta tctatccagt cttggtgaacg    420
tactgggaca actgtaaccg ttgcacctgc caggaraaca ggcagtggca gtgtgaccaa     480
gaaccatgcc tggctggatcc agacatgatc aaagccatca accagggcaa ctatggctgg    540
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ctgggcacca tccgccatc ttcctcggtc atgaacatgc atgaaattta tacagtgctg      660
aacccagggg aggtgcttcc cacagccttc gaggcctctg arartkkycc amcctgwttc     720
awsagcctct wgaccaaggc aactgtgcag gctcctgggc cttctccaca gcagctgtgg     780
catccgatcg tgtctcaatc cattctctgg gacacatgac gcctgtcctg tcgccccaga     840
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cctggtggtt cctgcgtcgc cgagggtgg tgtctgacca ctgctaccc ttctcgggcc        960
gtgaacgaga cgaggctggc cctgcgcccc cctgtatgat gcacagccga gccatgggtc     1020
ggggcaagcg ccaggccact gcccactgcc ccaacagcta tgttaataac aatgacatct     1080
accaggtcac tcctgtctac cgcctcggct ccaacgacaa ggagatcatg aaggagctga    1140
tggagaatgc ccctgttcca agccctcatg gaggtgcatg aggacttctt cctataacaa    1200
gggargcatc tacagccaca cgccagtgag ccttgggagg ccaganagat accgccggca    1260
tgggacccac tcagtcaaga tcacaggatg gggagaggag acgctgccag atggaatgac    1320
gctcaaatac tggactgcgg ccaactcctg gggcccagcc tggggcgaga ggggccactt     1380
ccgcatcgtg cgcggcgtca atgagtgcga catcgagagc ttcgtgctgg gcgtctgggg    1440
ccgcgtgggc atggaggaca tgggtcatca ctgaggctgc gggcaccacg cggggtcggg    1500
cctgggatcc aggctaaggg ccggcggaag aggccccaat ggggcggtga cccagcctc     1560
gcccgacaga gcccggggcg caggcgggcg ccaggcgcgt aatcccggcg cgggttccgc     1620
tgacgcagcg cccgcctgg gagccgcggg caggcgagac tggcggagcc cccagacctc     1680
ccagtgggga cggggcaggg cctggcctgg gaaaagcaca gctgcagatc ccaggcctct    1740
ggcgccccca ctcaagacta ccaaagccag gacactcaag tctccagccc cactaccca     1800
cccactcct gtattctttt tttttttttt ttagacaggg tcttgnctcc gttgcccag     1860
gttggagtgc agtggcccat cagggctcac tgtaacctcc gactcctggg ttcaagtgac   1920
cctcccacct cagcctctca agtagctggg actatcaggt gcaccaccac acctggctaa    1980
tttttgtatt ttttgtaaag agggggggtc cactgtgttg cccaggctgg tctcgaactc   2040
ctgggctcaa gcggtccacc tgcctccgcc tcccaaagtg actgggattg ccaggcatga   2100
gccactgcac ccagtcctg tattcttatt cttcagatat ttatttttct tttcactgtt    2160
ttaaaataaa accaaagtat tgatcaaaaa aaaaaaaaaa aaa                      2203
```

<210> 40
<211> 1726
<212> DNA
<213> Homo sapiens

<400> 40

```
cgtctgatta aggtacctt tgggaaatta aggttctata gaaattactg ggctcaatct      60
agtgatacaa atatgtgttg tttgatttat caacacatta caaaccttaa ctttggagtt    120
ttaatatctg gttatctta atatctggtt atctttcttc tgaagtgtat gtacacaaaa    180
ttgatgctaa ataaggtctt gttgtttgg caaatagtga aatgcaaggt attggtagat   240
```

```
cagtactgtt ataactttgg tgcaaagttg ctgcatgcag attggctgtg ggaccttgtt       300
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gtttgcagca attaggcttt attggtgcac taaggagaag cagagaggag aagcaattct       540
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tagtagttta cccaagatta tgcagctagt taaaagtggt gctggggctg ggcttggtgg       1440
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ttgcttgagc cccagaggtt gaggctgcag tgagccatga ttatgccact gcacatctgt      1680
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```

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<210> 41
<211> 1102
<212> DNA
<213> Homo sapiens
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<400> 41
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atgccctttg tcttcagtta ccagggtagg tagggaaggc tgttgggtca gggcagggct      180
aggcatgtct gagctcagac tcttcttggg caggtcttgc tgtggctgct gtgggggatg      240
ggggtgaggt tcccaggtca atggtgttat gttcctagga agtttatgtt tttctctcct      300
gtgtcatgca ggttgtcagg gaagtggggg aaagccagca gtcacaggcc tcacccagct      360
cccacataat ccaaagggct ggtttcactc ccaccatgcc ccccgacccc aatagcaccg      420
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agctgtgaaa gcaagtttgg ctttccttct tccctgcct gtagagtctg cacactggat       540
tcaggccctc cccaaagttc tggccaggag acttctcgat tagttcaaat tgttgccaag      600
ttcagctgga gatttcctc tcctgtggcc tttcccagtg cctctggcca ccctaccgaa       660
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cttccacggt ttgggcactc acagtatttg gatcatctcc tgggtccagc aggagcaatc      960
tgcttccttc agaaggtctg tgggtcccccc ccggcttcct gatttattcc tgccgtcatt     1020
gaagacgag gcgacttcct ccttggaaac tttaggcgcc actgctcagt ccgaaaaagc       1080
ccattccatt ttctactaat tg                                              1102
```

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<210> 42
<211> 1397
<212> DNA
<213> Homo sapiens
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<400> 42
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atttggcctg ctggggggaga agaccggcca gctgcttgag tttgacagca ccaacgtgtc    180
cgatacggca gcaaagcctt tgggaagacc atatcctcca tactccttgg ccgatttctc     240
ttggaacaac atcactgatt cattggatcc tgccaccctg agtgccacat ttcaaggcca     300
ccccatgaac gaccctacca ggacttttgc caatggcagc ctggccttca gggtccaggc     360
cttttccagg tccagccgac cagcccaacc ccctcgcctc ctgcacacag cagacacctg     420
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cagccctgcc ctgccaagct tcccctcttc atcctgcctt agcatactct cttcccagt     720
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ggacagggct attgataagg tccccttggt gttgccttct tgcatctcca cacatttccc    1260
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caagaaaata gatttatttt tttttcamaaa aaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1380·
aaaaaaggg cggccgc                                                      1397


<210> 43
<211> 1739
<212> DNA
<213> Homo sapiens

<400> 43
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tacttcgatg gcccccttcta cccagagatg tccaatggga ctctgcacca ctacttcgtg   180
cccgatgggg actatgagga gaacgatgac cccgagaagt gccagctgct cttcagggtg    240
agtgaccaca ggcgctgctc ccagggggag gggagccagg ttggcagcct gctgagcctc    300
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gtagtggttg cacagtcaca ctgatatgct gatttgctct ttctcattgt atgtctatgc   1380
ttcgtcatca gtgctatagt aaattacaaa gaaataggta gattgtatga acatacccac   1560
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aaatgcctat gatttaggtt accaatgtat tctttctcat ttggggtttt gcttctgtct      1620
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gctaagtttt attattcagg caataaacat gtcttcatgt aaaaaaaaaa aaaaaaaaa       1739
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<210> 44
<211> 3061
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2755)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2849)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2919)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2983)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2987)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2998)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3027)
<223> n equals a,t,g, or c

<400> 44
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ttctatataa taggaggtgt ggccactctc ctcctcatcc ttgtcatcat tgtgttcaag       180
gagaaaccta aatatcccc cagcagggcc caatccctga gctatgcctt gacctctcct       240
gatgcctcat acttaggttc catcgcccgg ctcttcaaaa atctcaactt tgtgctgctt       300
gtcatcacct atggtctgaa tgctggtgct ttttatgcct tgtccactct tctgaatcgc       360
atggtgatct ggcactaccc gggggaagaa gtgaatgctg gaagaattgg cctgacgatc       420
gtcattgcag gaatgcttgg ggctgtgatc tcaggaatct ggctggatag gtccaaaacc       480
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tcagaaggca tctcctccgg cctcctcaac atatctgcac aggtatttgg gatcatcttc       720
accatctccc agggccagat tattgacaac tatggaacca agcctgggaa catcttcctg       780
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<210> 45
<211> 974
<212> DNA
<213> Homo sapiens

<400> 45

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tgtgtgtggt  gtgtggtgta  ggagaggccc  tgatatttac  ctgtaagtgt  tagagttgta    180
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agaagcagca ggggactag ttaggaggct gaggtgggag gattgcttgg gcctgggagg        900
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<210> 46
<211> 1256
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1240)
<223> n equals a,t,g, or c

<400> 46
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ccttaacttc ctccgcgggg cccagccacc ttcgggagtc cgggttgccc acctgcaaac        180
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gaagattttt ccatttgtat tactgcttcc cattgagtaa tcatactcaa ctgggggaag       1140
gggtgctcct taaatatata tagatatgta tatatacatg tttttctatt aaaaaatagac      1200
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<210> 47
<211> 936
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (893)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (895)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (905)
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (911)
<223> n equals a,t,g, or c

<400> 47
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ttccagtgtc ctttctagca taccatgttg cctctaaaga ttgcagctcc ttatttacta
240
gaaaattgtt cctgcccaat ctacatctcc acctcacccc atctttcctt aagcactatg
300
tttgtgtttt tatcagtatt atattcattg tctttggaat acatgttctt gtttgtgttt
360
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420
atgttttgc tatgtacagt ttaaaaatgt gaagtttgta gctttaactt tttgtaagaa
480
aatctaataa cactggctta agtgctgact tgaaatgcta ttttgtaagg tttggatgta
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agtaatcaat tgaggtcagc agtttgtatg agacatagct tcctccattg cccccactcc
600
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660
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720
aaacccttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
840
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aantnaaaaa
900
aaaangaaac naaaaaaaaa aaaaaaaaaa aaaaaa
936
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<210> 48
<211> 1765
<212> DNA
<213> Homo sapiens

<400> 48
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ctcttttgct ggctctgggt ctctttggcg tcttgaacct tatgccttcc ctattgaagt
120
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<211> 1194
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2290)
<223> n equals a,t,g, or c

<400> 50
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<211> 1314
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<400> 52

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<210> 53
<211> 1439
<212> DNA
<213> Homo sapiens

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<211> 1368
<212> DNA
<213> Homo sapiens

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<211> 1446
<212> DNA
<213> Homo sapiens

<400> 55
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1446
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<210> 56
<211> 143
<212> PRT
<213> Homo sapiens

<220>
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<222> (143)
<223> Xaa equals stop translation

<400> 56

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Tyr Val Glu Lys Gln Arg Gln Asp Lys Met Tyr Ser Tyr Ser Ser Asp
        35                  40                  45

His Thr Arg Val Asp Glu Tyr Tyr Ile Glu Asp Thr Pro Ile Tyr Gly
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Asn Leu Asp Asp Met Ile Ser Glu Pro Met Asp Glu Asn Cys Tyr Glu
 65                  70                  75                  80

Gln Met Lys Ala Arg Pro Glu Lys Ser Val Asn Lys Met Gln Glu Ala
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Thr Pro Ser Ala Gln Ala Thr Asn Glu Thr Gln Met Cys Tyr Ala Ser
            100                 105                 110

Leu Asp His Ser Val Lys Gly Lys Arg Arg Ser Pro Gly Asn Arg Ile
            115                 120                 125

Leu Ile Ser Gln Thr Arg Met Glu Met Ser Asn Tyr Met Gln Xaa
     130                 135                 140
```

<210> 57
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (51)
<223> Xaa equals stop translation

<400> 57
```
Met Ala Leu Met Trp Ser Leu Trp Tyr Phe Asn Ser Val Phe Ile Ile
```

Ser Cys Val Ser Gly Lys Ile Val Leu Thr Phe Pro Leu Tyr Thr Thr
                20   25   30

Val Cys Ser Tyr Gly Ala Leu Asn Cys Leu Thr Glu Glu Pro Ser Ser
        35   40   45

Val Phe Xaa
    50

<210> 58
<211> 102
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals stop translation

<400> 58
Met Glu Glu Ala Ile Leu Val Pro Cys Val Leu Gly Leu Leu Leu Leu
1   5   10   15

Pro Ile Leu Ala Met Leu Met Ala Leu Cys Val His Cys His Arg Leu
        20   25   30

Pro Gly Ser Tyr Asp Ser Thr Ser Ser Asp Ser Leu Tyr Pro Lys Gly
        35   40   45

His Pro Val Gln Thr Ala Ser His Gly Cys Pro Leu Ala Thr Cys Leu
    50   55   60

Pro Thr Cys His Leu Leu Pro Thr Pro Glu Pro Ala Arg Pro Ala Pro
65   70   75   80

His Pro Lys Ile Pro Ala Ala Pro Trp Gly Leu Pro Pro Asp Ala Ile
                85   90   95

Phe Pro Ala Gly Phe Xaa
            100

<210> 59
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

```
<400> 59
Met Ser Cys Ile Gly Arg Met Arg Leu Ile Cys Phe Ile Ile Leu Arg
  1               5                   10                  15

Ile Cys Gly Leu Glu His Leu Phe Gly Asn Met Gly Leu Gly Xaa Lys
              20                  25                  30

Asn Gly His Leu Pro Gly His Tyr Gly His Ser Leu Glu Phe Phe Xaa
          35                  40                  45




<210> 60
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (98)
<223> Xaa equals stop translation

<400> 60
Met Ile Leu Leu Leu Ser Leu Phe Gln Gly Val Arg Gly Ser Leu Gly
  1               5                   10                  15

Ser Pro Gly Asn Arg Glu Asn Lys Glu Lys Lys Val Phe Ile Ser Leu
              20                  25                  30

Val Gly Ser Arg Gly Leu Gly Cys Ser Ile Ser Ser Gly Pro Ile Gln
          35                  40                  45

Lys Pro Gly Ile Phe Ile Ser His Val Lys Pro Gly Ser Leu Ser Ala
      50                  55                  60

Glu Val Gly Leu Glu Ile Gly Asp Gln Ile Val Glu Val Asn Gly Val
 65                  70                  75                  80

Asp Phe Ser Asn Leu Asp His Lys Glu Leu Gln Leu Ala Gly Ser Cys
                  85                  90                  95

Ser Xaa




<210> 61
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals stop translation

<400> 61
```

```
Met Trp Phe Arg Cys Phe Leu Leu Ile Phe Val Ser Ser Val Thr Leu
 1               5                  10                  15

Thr Gly Asp Phe Arg Asn Met Lys Lys Pro Ser Ser Leu Cys Leu Phe
            20                  25                  30

Arg Gln Gly Leu Met Ser Ala Ser Glu Val Ser Gly Ser Gly Ser Gly
        35                  40                  45

Glu Gly Asp Xaa
        50


<210> 62
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals stop translation

<400> 62
Met Tyr Cys Leu Cys Gly Leu Leu Leu Gln Ala Leu Leu Arg Leu Cys
 1               5                  10                  15

Asn Gly Tyr Lys Thr Gln Lys Asn His Arg Glu Leu Arg Met Cys Gly
            20                  25                  30

Ile Ile Ala Gln Gly Lys Ser Arg Trp Gln Leu His Cys Tyr Pro Gly
        35                  40                  45

Met Lys Ser Xaa
        50


<210> 63
<211> 71
<212> PRT
<213> Homo sapiens

<400> 63
Met Leu Pro Leu Lys Ile Ala Ala Pro Tyr Leu Leu Glu Asn Cys Ser
 1               5                  10                  15

Cys Pro Ile Tyr Ile Ser Thr Ser Pro His Leu Phe Leu Ser Thr Met
            20                  25                  30

Phe Val Phe Leu Ser Val Leu Tyr Ser Leu Ser Leu Glu Tyr Met Phe
        35                  40                  45

Leu Phe Val Phe Gly Lys Lys Ile Ser Phe Thr Ser Leu His Ser Asp
        50                  55                  60

Gln Leu Gly Lys Lys Lys Ala
 65                  70
```

```
<210> 64
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation

<400> 64
Met Tyr Met Lys Gln Val Val Ala Cys Arg Asp Gln Leu Ile Leu Val
1               5                   10                  15

Leu Trp Leu Ile Glu Leu Leu Cys Ile Gln Gly Phe Cys Lys Ser Lys
            20                  25                  30

Ser Asp Phe Ser Ser Arg Ile Tyr Ser Xaa
        35                  40


<210> 65
<211> 183
<212> PRT
<213> Homo sapiens

<400> 65
Met Ser Lys Glu Pro Leu Ile Leu Trp Leu Met Ile Glu Phe Trp Trp
1               5                   10                  15

Leu Tyr Leu Thr Pro Val Thr Ser Glu Thr Val Val Thr Glu Val Leu
            20                  25                  30

Gly His Arg Val Thr Leu Pro Cys Leu Tyr Ser Ser Trp Ser His Asn
        35                  40                  45

Ser Asn Ser Met Cys Trp Gly Lys Asp Gln Cys Pro Tyr Ser Gly Cys
    50                  55                  60

Lys Glu Ala Leu Ile Arg Thr Asp Gly Met Arg Val Thr Ser Arg Lys
65              70                  75                  80

Ser Ala Lys Tyr Arg Leu Gln Gly Thr Ile Pro Arg Gly Asp Val Ser
                85                  90                  95

Leu Thr Ile Leu Asn Pro Ser Glu Ser Asp Ser Gly Val Tyr Cys Cys
            100                 105                 110

Arg Ile Glu Val Pro Gly Trp Phe Asn Asp Val Lys Ile Asn Val Arg
        115                 120                 125

Leu Asn Leu Gln Arg Ala Ser Thr Thr Thr His Arg Thr Ala Thr Thr
    130                 135                 140

Thr Thr Arg Arg Thr Thr Thr Thr Ser Pro Thr Thr Thr Arg Gln Met
145                 150                 155                 160

Thr Thr Thr Pro Ala Ala Leu Pro Thr Thr Lys Lys Lys Lys Lys Lys
                165                 170                 175
```

```
Lys Lys Lys Lys Lys Lys Lys
            180


<210> 66
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation

<400> 66
Met Leu Tyr Phe Cys Ser Ser Ile Trp Phe Gly Ile Tyr Phe Val Ala
 1               5                   10                  15

Leu Ile Thr Val Phe Leu Lys Thr Leu Pro Pro Leu Thr Val Gly Lys
            20                  25                  30

Gly Pro Phe Ser Gly Lys Phe Val Ala Phe Phe Phe Phe Leu Lys Glu
        35                  40                  45

Ser Cys Ser Leu Leu Ser Ile Val Phe Xaa
     50                  55


<210> 67
<211> 100
<212> PRT
<213> Homo sapiens

<400> 67
Met Gln Phe Cys Glu Leu Trp Val Pro Leu Leu Ser Thr Leu Leu Asn
 1               5                   10                  15

Thr Trp Gln Asn Leu Thr Leu Gly Cys Pro Ser Pro Asp Ser Lys Ser
            20                  25                  30

Lys Ser Ser Pro Asp Pro Arg Ala Cys Pro Leu Phe Pro Ser Phe Leu
        35                  40                  45

Ser Phe Phe Leu Val Ser Ser Phe Phe Phe Phe Ser Phe Phe Phe
     50                  55                  60

Leu Ser Leu Ser Phe Phe Leu Pro Phe Phe Phe Leu Phe Ser Phe Phe
65                  70                  75                  80

Leu Ser Leu Ser Leu Ser Phe Phe Gln Asp Pro Val Gln Lys Lys Lys
                85                  90                  95

Lys Lys Thr Arg
            100


<210> 68
<211> 74
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals stop translation

<400> 68
Met Phe Tyr Leu Tyr Ser Ile Phe Gln Val Leu Val Trp Leu Cys Gln
1   5   10   15

Ala Lys His Leu Ser Gln Ile Ser Ala Arg Ser Ser Arg Arg Leu Trp
            20   25   30

Arg Leu Ser Leu Ile Thr Phe Pro Pro Tyr Leu Ala Thr Ser Leu Ser
        35   40   45

His Gly Pro His Val Cys Leu Gln Thr Leu Gly Tyr Glu Ser Cys Glu
    50   55   60

His Thr Asp Leu Cys Phe Leu His Asp Xaa
65   70

<210> 69
<211> 137
<212> PRT
<213> Homo sapiens

<400> 69
Met Met Phe Ala Gly Ser Cys Gly Phe Pro Ala Gln Pro Ala Thr Thr
1   5   10   15

Gly Pro Cys Gly Tyr Val Val Gln Pro Asn Thr Thr Gly Pro Phe Leu
            20   25   30

Tyr Val Arg Gln Phe Tyr Pro Ala Arg His Leu Trp Thr Pro Ser Pro
        35   40   45

Val Cys Lys Pro Ser Ile Lys Pro His Val Ser Phe Ala Gly Ser Gly
    50   55   60

Ser Leu Trp Arg Leu Glu Pro Tyr Ala Phe Pro Ile Glu Val Asn Arg
65   70   75   80

Gly Ser Ala Gln His Trp Val Pro Gly Met Gln Pro Cys Leu Phe Met
                85   90   95

Phe Val Leu Met Gly Ile Met Trp Ala Thr Gly Ile Leu Pro Lys Ile
            100   105   110

Met Pro Ser Arg Lys Arg Cys Leu Ser Ile Asp Ile Pro Ala Ala Pro
        115   120   125

Gln Ala Gly Met Cys Leu Leu Ile Leu
    130   135

<210> 70
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals stop translation

<400> 70
Met Arg Thr Leu Ala Leu Leu Val Leu Leu Phe Cys Ser Cys Thr His
1   5   10   15

Ser Ser Met Gly Trp Gly Arg Gln Ala Trp Gly Val Ala Leu Gly Glu
            20   25   30

Val Arg Ser Pro Pro Ala Gln Asp Thr Val Ala Lys Thr Xaa
        35   40   45

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<210> 71
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (64)
<223> Xaa equals stop translation

<400> 71
Met Cys Ala Trp His Cys Val His Leu Ala Leu Cys Val Val Gly Met
1   5   10   15

Leu Phe Leu Leu Ser Val Thr Ser Ser Gln Phe Cys Lys Gln Arg Gln
            20   25   30

Asn His Ala Leu Pro Leu Lys Pro Ile Gly Phe Lys Cys His Leu Phe
        35   40   45

Asp Asp Ala Phe Pro Ile Thr Pro Phe Asp Thr Ser His Gly Thr Xaa
    50   55   60

<210> 72
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 72

```
Met Phe Met Tyr Val Trp Cys Pro Leu Val Leu Phe Phe Phe Leu Leu
 1               5                  10                      15

Val Phe Glu Leu Val Leu Asn Arg Ile Leu Ser Gly Phe Leu Lys Tyr
             20                  25                  30

Phe His Phe His His Gly Tyr Asn Lys Phe Ala Ala Cys Pro Asn Xaa
         35                  40                  45
```

<210> 73
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals stop translation

<400> 73
```
Met Val Ser Pro Trp Leu Pro Leu Leu Val Ser Leu Phe His Leu Leu
 1               5                  10                      15

Asn Cys Leu Arg Gly Val Gly Thr Ser Gly Gln Ser Leu Gly Leu Pro
             20                  25                  30

Ser Ser Ser Phe Pro Pro Thr Pro Glu His Lys Ala Thr Ala Arg Asp
         35                  40                  45

Xaa
```

<210> 74
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals stop translation

<400> 74
```
Gly Lys Thr Leu Tyr Leu Pro Val Cys Leu Ser Phe Leu His Ser Pro
 1               5                  10                      15

Ala Ser Thr Phe Leu Pro Trp Asn Gln Gly Phe Leu Ser Pro Phe Ala
             20                  25                  30

Phe Ser Thr Leu Gly Thr Pro Gly Ala Lys Gln Phe Ser Ile Xaa
         35                  40                  45
```

<210> 75

<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals stop translation

<400> 75
Met Val Ser Leu Cys Ser Gly Leu Pro Ser Ser Cys Leu Leu Leu Gly
1   5   10   15

Ser Thr Ala Ala Ile Ile Gln Arg Gln Val Cys Leu Phe Gln Gly Ala
            20   25   30

Arg Gln Trp Asn Pro Val Ser Glu Phe Leu Arg Ala His His Cys
        35   40   45

Gly Asn Arg Ala Gly Leu Pro Ala Val Leu Xaa
    50   55

<210> 76
<211> 318
<212> PRT
<213> Homo sapiens

<400> 76
Met Ala Lys Arg Thr Phe Ser Asn Leu Glu Thr Phe Leu Ile Phe Leu
1   5   10   15

Leu Val Met Met Ser Ala Ile Thr Val Ala Leu Leu Ser Leu Leu Phe
            20   25   30

Ile Thr Ser Gly Thr Ile Glu Asn His Lys Asp Leu Gly Gly His Phe
        35   40   45

Phe Ser Thr Thr Gln Ser Pro Pro Ala Thr Gln Gly Ser Thr Ala Ala
    50   55   60

Gln Arg Ser Thr Ala Thr Gln His Ser Thr Ala Thr Gln Ser Ser Thr
65   70   75   80

Ala Thr Gln Thr Ser Pro Val Pro Leu Thr Pro Glu Ser Pro Leu Gln
                85   90   95

Gln Asn Phe Ser Gly Tyr His Ile Gly Val Gly Arg Ala Asp Cys Thr
            100   105   110

Gly Gln Val Ala Asp Ile Asn Leu Met Gly Tyr Gly Lys Ser Gly Gln
        115   120   125

Asn Ala Gln Gly Ile Leu Thr Arg Leu Tyr Ser Arg Ala Phe Ile Met
    130   135   140

Ala Glu Pro Asp Gly Ser Asn Arg Thr Val Phe Val Ser Ile Asp Ile
145   150   155   160

Gly Met Val Ser Gln Arg Leu Arg Leu Glu Val Leu Asn Arg Leu Gln
            165   170   175

Ser Lys Tyr Gly Ser Leu Tyr Arg Arg Asp Asn Val Ile Leu Ser Gly
            180   185   190

Thr His Thr His Ser Gly Pro Ala Gly Tyr Phe Gln Tyr Thr Val Phe
            195   200   205

Val Ile Ala Ser Glu Gly Phe Ser Asn Gln Thr Phe Gln His Met Val
     210   215   220

Thr Gly Ile Leu Lys Ser Ile Asp Ile Pro His Thr Asn Met Lys Pro
225   230   235   240

Gly Lys Ile Phe Ile Asn Lys Gly Asn Val Asp Gly Val Gln Ile Asn
            245   250   255

Arg Ser Pro Tyr Ser Tyr Leu Gln Asn Pro Gln Ser Glu Arg Ala Arg
            260   265   270

Tyr Ser Ser Asn Thr Asp Lys Glu Met Ile Val Leu Lys Met Val Asp
            275   280   285

Leu Asn Gly Asp Asp Leu Gly Leu Ile Ser Phe Ser Phe Ser Lys Ser
            290   295   300

Ala Leu Gly Thr Tyr Tyr Glu Pro Arg Asn Thr Ser Leu Glu
305   310   315

<210> 77
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals stop translation

<400> 77
Met Ser Ser Trp Phe Thr Leu Leu Ala Ser Cys Phe His Leu Leu Trp
  1   5   10   15

Pro Leu Ser Arg Ser Ser His Val Pro Ser Ser Phe Gln Pro Pro Asp
          20   25   30

Leu Ser Ala Thr Phe Leu Leu Gln Ile Leu Gly Xaa
          35   40

<210> 78
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

<222> (48)
<223> Xaa equals stop translation

<400> 78
Met Leu Ile Ser Val Asp Ser Asn Val Pro Val Val Phe Leu Leu Leu
 1   5   10   15

Phe Ile Leu Val Ile Leu Cys His Met Glu Cys Lys Gly His Ile Tyr
                20   25   30

Ile Cys Val Cys Val Cys Val Tyr Met Tyr Ile Phe Lys Asn Ile Xaa
            35   40   45

<210> 79
<211> 525
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (210)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 79
Met Leu Ala Phe Pro Leu Leu Leu Thr Gly Leu Ile Ser Phe Arg Glu
 1   5   10   15

Lys Arg Leu Gln Asp Val Gly Thr Pro Ala Ala Arg Ala Arg Ala Phe
                20   25   30

Phe Thr Ala Pro Val Val Val Phe His Leu Asn Ile Leu Ser Tyr Phe
                35   40   45

Ala Phe Leu Cys Leu Phe Ala Tyr Val Leu Met Val Asp Phe Gln Pro
        50   55   60

Val Pro Ser Trp Cys Glu Cys Ala Ile Tyr Leu Trp Leu Phe Ser Leu
 65   70   75   80

Val Cys Glu Glu Met Arg Gln Leu Phe Tyr Asp Pro Asp Glu Cys Gly
                85   90   95

Leu Met Lys Lys Ala Ala Leu Tyr Phe Ser Asp Phe Trp Asn Lys Leu
            100   105   110

Asp Val Gly Ala Ile Leu Leu Phe Val Ala Gly Leu Thr Cys Arg Leu
            115   120   125

Ile Pro Ala Thr Leu Tyr Pro Gly Arg Val Ile Leu Ser Leu Asp Phe
        130   135   140

Ile Leu Phe Cys Leu Arg Leu Met His Ile Phe Thr Ile Ser Lys Thr
145   150   155   160

Leu Gly Pro Lys Ile Ile Ile Val Lys Arg Met Met Lys Asp Val Phe

```
                165                  170                   175

Phe Phe Leu Phe Leu Leu Ala Val Trp Val Val Ser Phe Gly Val Ala
            180              185              190

Lys Gln Ala Ile Leu Ile His Asn Glu Arg Arg Val Asp Trp Leu Phe
        195              200              205

Arg Xaa Ala Val Tyr His Ser Tyr Leu Thr Ile Phe Gly Gln Ile Pro
    210              215              220

Gly Tyr Ile Asp Gly Val Asn Phe Asn Pro Glu His Cys Ser Pro Asn
225              230              235              240

Gly Thr Asp Pro Tyr Lys Pro Lys Cys Pro Glu Ser Asp Ala Thr Gln
            245              250              255

Gln Arg Pro Ala Phe Pro Glu Trp Leu Thr Val Leu Leu Leu Cys Leu
        260              265          ·   270     ·

Tyr Leu Leu Phe Thr Asn Ile Leu Leu Leu Asn Leu Leu Ile Ala Met
        275              280              285

Phe Asn Tyr Thr Phe Gln Gln Val Gln Glu His Thr Asp Gln Ile Trp
    290              295              300

Lys Phe Gln Arg His Asp Leu Ile Glu Glu Tyr His Gly Arg Pro Ala
305              310              315              320

Ala Pro Pro Pro Phe Ile Leu Leu Ser His Leu Gln Leu Phe Ile Lys
            325              330              335

Arg Val Val Leu Lys Thr Pro Ala Lys Arg His Lys Gln Leu Lys Asn
            340              345              350

Lys Leu Glu Lys Asn Glu Glu Ala Ala Leu Leu Ser Trp Glu Ile Tyr
        355              360              365

Leu Lys Glu Asn Tyr Leu Gln Asn Arg Gln Phe Gln Gln Lys Gln Arg
    370              375              380

Pro Glu Gln Lys Ile Glu Asp Ile Ser Asn Lys Val Asp Ala Met Val
385              390              395              400

Asp Leu Leu Asp Leu Asp Pro Leu Lys Arg Ser Gly Ser Met Glu Gln
            405              410              415

Arg Leu Ala Ser Leu Glu Glu Gln Val Ala Gln Thr Ala Arg Ala Leu
        420              425              430

His Trp Ile Val Arg Thr Leu Arg Ala Ser Gly Phe Ser Ser Glu Ala
        435              440              445

Asp Val Pro Thr Leu Ala Ser Gln Lys Ala Ala Glu Glu Pro Asp Ala
    450              455              460

Glu Pro Gly Gly Arg Lys Lys Thr Glu Glu Pro Gly Asp Ser Tyr His
465              470              475              480
```

```
Val Asn Ala Arg His Leu Leu Tyr Pro Asn Cys Pro Val Thr Arg Phe
                485                 490                     495

Pro Val Pro Asn Glu Lys Val Pro Trp Glu Thr Glu Phe Leu Ile Tyr
            500                 505                 510

Asp Pro Pro Phe Tyr Thr Ala Glu Arg Lys Asp Ala Ala
            515                 520                 525
```

```
<210> 80
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 80
Met Ala Gly Thr Val Leu Gly Val Gly Ala Gly Val Phe Ile Leu Ala
  1               5                  10                  15

Leu Leu Trp Val Ala Val Leu Leu Leu Cys Val Leu Leu Ser Arg Ala
            20                  25                  30

Ser Gly Ala Ala Arg Phe Ser Val Ile Phe Tyr Ser Ser Val Leu Xaa
          35                  40                  45
```

```
<210> 81
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

<400> 81
Met Ser Leu Leu Leu Pro Pro Leu Ala Leu Leu Leu Leu Leu Ala Ala
  1               5                  10                  15

Leu Val Ala Pro Ala Thr Ala Ala Thr Ala Tyr Arg Pro Asp Trp Asn
            20                  25                  30

Arg Leu Ser Gly Leu Thr Arg Ala Arg Val Glu Thr Cys Gly Gly Xaa
          35                  40                  45
```

```
<210> 82
```

<211> 293
<212> PRT
<213> Homo sapiens

<400> 82

```
Met Ala Thr Ala Arg Pro Pro Trp Met Trp Val Leu Cys Ala Leu Ile
 1               5                  10                  15

Thr Ala Leu Leu Leu Gly Val Thr Glu His Val Leu Ala Asn Asn Asp
                20                  25                  30

Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly Ser Asn Gln
            35                  40                  45

Asp Leu Gly Ala Gly Ala Gly Glu Asp Ala Arg Ser Asp Asp Ser Ser
        50                  55                  60

Ser Arg Ile Ile Asn Gly Ser Asp Cys Asp Met His Thr Gln Pro Trp
65                  70                  75                  80

Gln Ala Ala Leu Leu Arg Pro Asn Gln Leu Tyr Cys Gly Ala Val
                85                  90                  95

Leu Val His Pro Gln Trp Leu Leu Thr Ala Ala His Cys Arg Lys Lys
            100                 105                 110

Val Phe Arg Val Arg Leu Gly His Tyr Ser Leu Ser Pro Val Tyr Glu
            115                 120                 125

Ser Gly Gln Gln Met Phe Gln Gly Val Lys Ser Ile Pro His Pro Gly
        130                 135                 140

Tyr Ser His Pro Gly His Ser Asn Asp Leu Met Leu Ile Lys Leu Asn
145                 150                 155                 160

Arg Arg Ile Arg Pro Thr Lys Asp Val Arg Pro Ile Asn Val Ser Ser
                165                 170                 175

His Cys Pro Ser Ala Gly Thr Lys Cys Leu Val Ser Gly Trp Gly Thr
            180                 185                 190

Thr Lys Ser Pro Gln Val His Phe Pro Lys Val Leu Gln Cys Leu Asn
        195                 200                 205

Ile Ser Val Leu Ser Gln Lys Arg Cys Glu Asp Ala Tyr Pro Arg Gln
    210                 215                 220

Ile Asp Asp Thr Met Phe Cys Ala Gly Asp Lys Ala Gly Arg Asp Ser
225                 230                 235                 240

Cys Gln Gly Asp Ser Gly Gly Pro Val Val Cys Asn Gly Ser Leu Gln
                245                 250                 255

Gly Leu Val Ser Trp Gly Asp Tyr Pro Cys Ala Arg Pro Asn Arg Pro
            260                 265                 270

Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Lys Trp Ile Gln Glu Thr
            275                 280                 285
```

```
Ile Gln Ala Asn Ser
    290


<210> 83
<211> 89
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (89)
<223> Xaa equals stop translation

<400> 83
Met Val Ala Gly Phe Val Phe Tyr Leu Gly Val Phe Val Val Cys His
 1               5                  10                  15

Gln Leu Ser Ser Ser Leu Asn Ala Thr Tyr Arg Ser Leu Val Ala Arg
            20                  25                  30

Glu Lys Val Phe Trp Asp Leu Ala Ala Thr Arg Ala Val Phe Gly Val
        35                  40                  45

Gln Ser Thr Ala Ala Ala Val Gly Ser Ala Gly Gly Pro Cys Ala Ala
    50                  55                  60

Cys Arg Gln Gly Ala Trp Pro Ala Glu Leu Val Leu Val Ser His His
 65                 70                  75                  80

Asp Ser Asn Gly Ile Leu Leu Leu Xaa
                85


<210> 84
<211> 250
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (213)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (215)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (250)
<223> Xaa equals stop translation

<400> 84
Met Trp Arg Cys Pro Leu Gly Leu Leu Leu Leu Leu Pro Leu Ala Gly
 1               5                   10                  15

His Leu Ala Leu Gly Ala Gln Gln Gly Arg Gly Arg Arg Glu Leu Ala
            20                  25                  30

Pro Gly Leu His Leu Arg Gly Ile Arg Asp Ala Gly Gly Arg Tyr Cys
        35                  40                  45

Gln Glu Gln Asp Leu Cys Cys Arg Gly Arg Ala Asp Asp Cys Ala Leu
    50                  55                  60

Pro Tyr Leu Gly Ala Ile Cys Tyr Cys Asp Leu Phe Cys Asn Arg Thr
 65                 70                  75                  80

Val Ser Asp Cys Cys Pro Asp Phe Trp Asp Phe Cys Leu Gly Val Pro
                85                  90                  95

Pro Pro Phe Pro Pro Ile Gln Gly Cys Met His Gly Gly Arg Ile Tyr
                100                 105                 110

Pro Val Leu Gly Thr Tyr Trp Asp Asn Cys Asn Arg Cys Thr Cys Gln
            115                 120                 125

Glu Asn Arg Gln Trp Gln Cys Asp Gln Glu Pro Cys Leu Val Asp Pro
        130                 135                 140

Asp Met Ile Lys Ala Ile Asn Gln Gly Asn Tyr Gly Trp Gln Ala Gly
145                 150                 155                 160

Xaa His Ser Ala Phe Trp Gly Met Thr Leu Asp Glu Gly Ile Arg Tyr
                165                 170                 175

Arg Leu Gly Thr Ile Arg Pro Ser Ser Ser Val Met Asn Met His Glu
            180                 185                 190

Ile Tyr Thr Val Leu Asn Pro Gly Glu Val Leu Pro Thr Ala Phe Glu
        195                 200                 205
```

```
Ala Ser Glu Xaa Xaa Pro Xaa Xaa Phe Xaa Ser Leu Xaa Thr Lys Ala
        210                 215                 220

Thr Val Gln Ala Pro Gly Pro Ser Pro Gln Gln Leu Trp His Pro Ile
225                 230                 235                 240

Val Ser Gln Ser Ile Leu Trp Asp Thr Xaa
                245                 250
```

<210> 85
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation

<400> 85
```
Met Tyr Thr Lys Leu Met Leu Asn Lys Val Leu Leu Phe Trp Gln Ile
  1               5                  10                  15

Val Lys Cys Lys Val Leu Val Asp Gln Tyr Cys Tyr Asn Phe Gly Ala
               20                  25                  30

Lys Leu Leu His Ala Asp Trp Leu Trp Asp Leu Val His Phe Leu Arg
          35                  40                  45

Thr Asn Val Glu Phe Glu Lys Thr Pro Xaa
     50                  55
```

<210> 86
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals stop translation

<400> 86
```
Met Phe Leu Gly Ser Leu Cys Phe Ser Leu Leu Cys His Ala Gly Cys
  1               5                  10                  15

Gln Gly Ser Gly Gly Lys Pro Ala Val Thr Gly Leu Thr Gln Leu Pro
               20                  25                  30

His Asn Pro Lys Gly Trp Phe His Ser His His Ala Pro Arg Pro Gln
          35                  40                  45

Xaa
```

<210> 87
<211> 172
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (170)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 87

```
Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro
 1               5                  10                  15

Ser Pro Leu Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly
            20                  25                  30

Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn
        35                  40                  45

Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr
    50                  55                  60

Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro
 65                 70                  75                  80

Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp Pro Thr
                85                  90                  95

Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Val Gln Ala Phe Ser
            100                 105                 110

Arg Ser Ser Arg Pro Ala Gln Pro Pro Arg Leu Leu His Thr Ala Asp
        115                 120                 125

Thr Cys Gln Leu Glu Val Ala Leu Ile Gly Ala Ser Pro Arg Gly Asn
    130                 135                 140

Arg Ser Leu Phe Gly Leu Glu Val Ala Thr Leu Gly Gln Gly Pro Asp
145                 150                 155                 160

Cys Pro Ser Met Gln Glu Gln His Ser Xaa Glu Arg
                165                 170
```

<210> 88
<211> 174
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (174)
<223> Xaa equals stop translation

<400> 88

```
Met Val Phe Leu Lys Phe Phe Cys Met Ser Phe Phe Cys His Leu Cys
 1               5                  10                  15
```

```
Gln Gly Tyr Phe Asp Gly Pro Leu Tyr Pro Glu Met Ser Asn Gly Thr
          20                  25                  30

Leu His His Tyr Phe Val Pro Asp Gly Asp Tyr Glu Glu Asn Asp Asp
          35                  40                  45

Pro Glu Lys Cys Gln Leu Leu Phe Arg Val Ser Asp His Arg Arg Cys
      50                  55                  60

Ser Gln Gly Glu Gly Ser Gln Val Gly Ser Leu Leu Ser Leu Thr Leu
  65                  70                  75                  80

Arg Glu Glu Phe Thr Val Leu Gly His Gln Val Glu Gly Cys Trp Ala
              85                  90                  95

Arg Ala Gly Gly His Gln Gln Lys His Leu Leu Arg Pro Arg Arg Gly
             100                 105                 110

Arg Glu Leu Trp Gln Val Pro Ala Ala Gly Val Pro Pro Asp Arg Gly
          115                 120                 125

Met Pro Thr Pro Thr Arg Thr Asn Pro Ser Leu Ser Trp Arg Ala Ser
      130                 135                 140

Ser Ser Arg Ala Arg Asn Arg Thr Ala Gly Arg Arg Ala Gly Ser Thr
145                 150                 155                 160

Arg Thr Phe Trp Glu Cys Trp Ser Thr Pro Gly Pro Cys Xaa
                 165                 170


<210> 89
<211> 275
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (275)
<223> Xaa equals stop translation

<400> 89
Met Phe Tyr Ile Ile Gly Gly Val Ala Thr Leu Leu Leu Ile Leu Val
  1               5                  10                  15

Ile Ile Val Phe Lys Glu Lys Pro Lys Tyr Pro Pro Ser Arg Ala Gln
          20                  25                  30

Ser Leu Ser Tyr Ala Leu Thr Ser Pro Asp Ala Ser Tyr Leu Gly Ser
          35                  40                  45

Ile Ala Arg Leu Phe Lys Asn Leu Asn Phe Val Leu Leu Val Ile Thr
      50                  55                  60

Tyr Gly Leu Asn Ala Gly Ala Phe Tyr Ala Leu Ser Thr Leu Leu Asn
  65                  70                  75                  80

Arg Met Val Ile Trp His Tyr Pro Gly Glu Glu Val Asn Ala Gly Arg
              85                  90                  95
```

```
Ile Gly Leu Thr Ile Val Ile Ala Gly Met Leu Gly Ala Val Ile Ser
            100                 105                 110

Gly Ile Trp Leu Asp Arg Ser Lys Thr Tyr Lys Glu Thr Thr Leu Val
        115                 120                 125

Val Tyr Ile Met Thr Leu Val Gly Met Val Val Tyr Thr Phe Thr Leu
    130                 135                 140

Asn Leu Gly His Leu Trp Val Val Phe Ile Thr Ala Gly Thr Met Gly
145                 150                 155                 160

Phe Phe Met Thr Gly Tyr Leu Pro Leu Gly Phe Glu Phe Ala Val Glu
                165                 170                 175

Leu Thr Tyr Pro Glu Ser Glu Gly Ile Ser Ser Gly Leu Leu Asn Ile
                180                 185                 190

Ser Ala Gln Val Phe Gly Ile Ile Phe Thr Ile Ser Gln Gly Gln Ile
            195                 200                 205

Ile Asp Asn Tyr Gly Thr Lys Pro Gly Asn Ile Phe Leu Cys Val Phe
        210                 215                 220

Leu Thr Leu Gly Ala Ala Leu Thr Ala Phe Ile Lys Ala Asp Leu Arg
225                 230                 235                 240

Arg Gln Lys Ala Asn Lys Glu Thr Leu Glu Asn Lys Leu Gln Glu Glu
                245                 250                 255

Glu Glu Glu Ser Asn Thr Ser Lys Val Pro Thr Ala Val Ser Glu Asp
            260                 265                 270

His Leu Xaa
        275


<210> 90
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (83)
<223> Xaa equals stop translation

<400> 90
Met Lys Lys Val Ala Arg Leu Ser Ser Leu Gly His Val Val Trp Arg
  1                 5                 10                  15

Leu Tyr Ala Arg Val Leu Ala Leu Ile Thr Cys Ile Phe Trp Val Leu
            20                  25                  30

Ala Leu Ile Ile Cys Ile Phe Thr Pro Gln Ile Phe Phe Lys His Leu
        35                  40                  45

Leu His Ala Arg Pro Cys Ser Arg Tyr Arg Arg Tyr Asn Ser Lys Asn
```

```
           50                    55                    60
Thr Asp Leu Ala Leu Met Lys Leu Lys Leu Leu Arg Gln Ala Asp Ser
  65                    70                    75                    80

Asp Lys Xaa



<210> 91
<211> 212
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (212)
<223> Xaa equals stop translation

<400> 91
Met Ala Asn Ala Gly Leu Gln Leu Leu Gly Phe Ile Leu Ala Phe Leu
  1               5                   10                  15

Gly Trp Ile Gly Ala Ile Val Ser Thr Ala Leu Pro Gln Trp Arg Ile
               20                  25                  30

Tyr Ser Tyr Ala Gly Asp Asn Ile Val Thr Ala Gln Ala Met Tyr Glu
           35                  40                  45

Gly Leu Trp Met Ser Cys Val Ser Gln Ser Thr Gly Gln Ile Gln Cys
     50                  55                  60

Lys Val Phe Asp Ser Leu Leu Asn Leu Ser Ser Thr Leu Gln Ala Thr
  65                  70                  75                    80

Arg Ala Leu Met Val Val Gly Ile Leu Leu Gly Val Ile Ala Ile Phe
                 85                  90                      95

Val Ala Xaa Val Gly Met Lys Cys Met Lys Cys Leu Glu Asp Asp Glu
             100                 105                 110

Val Gln Lys Met Arg Met Ala Val Ile Gly Gly Ala Ile Phe Leu Leu
         115                 120                 125

Ala Gly Leu Ala Ile Leu Val Ala Thr Ala Trp Tyr Gly Asn Arg Ile
     130                 135                 140

Val Gln Glu Phe Tyr Asp Pro Met Thr Pro Val Asn Ala Arg Tyr Glu
145                 150                 155                    160

Phe Gly Gln Ala Leu Phe Thr Gly Trp Ala Ala Ala Ser Leu Cys Leu
             165                 170                 175

Leu Gly Gly Ala Leu Leu Cys Cys Ser Cys Pro Arg Lys Thr Thr Ser
```

                    180   185   190

Tyr Pro Thr Pro Arg Pro Tyr Pro Lys Pro Ala Pro Ser Ser Gly Lys
        195   200   205

Asp Tyr Val Xaa
    210

<210> 92
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals stop translation

<400> 92
Met Phe Val Phe Leu Ser Val Leu Tyr Ser Leu Ser Leu Glu Tyr Met
 1   5   10   15

Phe Leu Phe Val Phe Gly Lys Lys Ile Ser Phe Thr Ser Leu His Ser
            20   25   30

Asp Gln Leu Gly Lys Lys Lys Ala Xaa
        35   40

<210> 93
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals stop translation

<400> 93
Met Gln Pro Cys Leu Phe Met Phe Val Leu Met Gly Ile Met Trp Ala
 1   5   10   15

Thr Gly Ile Leu Pro Lys Ile Met Pro Ser Arg Lys Arg Cys Leu Ser
            20   25   30

Ile Asp Ile Pro Ala Ala Pro Gln Ala Gly Met Cys Leu Leu Ile Leu
        35   40   45

Xaa

<210> 94
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (90)
<223> Xaa equals stop translation

<400> 94
Met Ala Lys Arg Thr Phe Ser Asn Leu Glu Thr Phe Leu Ile Phe Leu
1   5   10   15

Leu Val Met Met Ser Ala Ile Thr Val Ala Leu Leu Ser Leu Leu Phe
                20   25   30

Ile Thr Ser Gly Thr Ile Glu Asn His Lys Asp Leu Gly Gly His Phe
            35   40   45

Phe Ser Thr Thr Gln Ser Pro Ala Thr Gln Gly Ser Thr Ala Ala
        50   55   60

Gln Arg Ser Thr Ala Thr Gln His Ser Thr Ala Thr Gln Ser Ser Asn
65   70   75   80

Ser Gln Leu Lys Leu Leu Gln Cys Leu Xaa
                85   90

<210> 95
<211> 486
<212> PRT
<213> Homo sapiens

<400> 95
Met Gln Pro Ser Gly Leu Glu Gly Pro Gly Thr Phe Gly Arg Trp Pro
1   5   10   15

Leu Leu Ser Leu Leu Leu Leu Leu Leu Leu Gln Pro Val Thr Cys
                20   25   30

Ala Tyr Thr Thr Pro Gly Pro Pro Arg Ala Leu Thr Thr Leu Gly Ala
            35   40   45

Pro Arg Ala His Thr Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu
        50   55   60

Ser Ser Pro Ser Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met
65   70   75   80

Arg Asp Phe Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu
                85   90   95

Arg Gln Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe
                100   105   110

Ser Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly
            115   120   125

Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg Asp
        130   135   140

Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg Met Cys

145   150   155   160
Ala Ser Tyr Ser Glu Leu Glu Leu Val Thr Ser Ala Lys Ala Leu Asn
                165   170   175

Asp Thr Gln Lys Leu Ala Cys Leu Ile Gly Val Glu Gly Gly His Ser
            180   185   190

Leu Asp Asn Ser Leu Ser Ile Leu Arg Thr Phe Tyr Met Leu Gly Val
        195   200   205

Arg Tyr Leu Thr Leu Thr His Thr Cys Asn Thr Pro Trp Ala Glu Ser
    210   215   220

Ser Ala Lys Gly Val His Ser Phe Tyr Asn Asn Ile Ser Gly Leu Thr
225   230   235   240

Asp Phe Gly Glu Lys Val Val Ala Glu Met Asn Arg Leu Gly Met Met
                245   250   255

Val Asp Leu Ser His Val Ser Asp Ala Val Ala Arg Arg Ala Leu Glu
            260   265   270

Val Ser Gln Ala Pro Val Ile Phe Ser His Ser Ala Ala Arg Gly Val
        275   280   285

Cys Asn Ser Ala Arg Asn Val Pro Asp Asp Ile Leu Gln Leu Leu Lys
    290   295   300

Lys Asn Gly Gly Val Val Met Val Ser Leu Ser Met Gly Val Ile Gln
305   310   315   320

Cys Asn Pro Ser Ala Asn Val Ser Thr Val Ala Asp His Phe Asp His
                325   330   335

Ile Lys Ala Val Ile Gly Ser Lys Phe Ile Gly Ile Gly Gly Asp Tyr
            340   345   350

Asp Gly Ala Gly Lys Phe Pro Gln Gly Leu Glu Asp Val Ser Thr Tyr
        355   360   365

Pro Val Leu Ile Glu Glu Leu Leu Ser Arg Gly Trp Ser Glu Glu Glu
    370   375   380

Leu Gln Gly Val Leu Arg Gly Asn Leu Leu Arg Val Phe Arg Gln Val
385   390   395   400

Glu Lys Val Gln Glu Glu Asn Lys Trp Gln Ser Pro Leu Glu Asp Lys
                405   410   415

Phe Pro Asp Glu Gln Leu Ser Ser Ser Cys His Ser Asp Leu Ser Arg
            420   425   430

Leu Arg Gln Arg Gln Ser Leu Thr Ser Gly Gln Glu Leu Thr Glu Ile
        435   440   445

Pro Ile His Trp Thr Ala Lys Leu Pro Ala Lys Trp Ser Val Ser Glu
    450   455   460

```
Ser Ser Pro His Met Ala Pro Val Leu Ala Val Val Ala Thr Phe Pro
465                 470                 475                 480

Val Leu Ile Leu Trp Leu
                485


<210> 96
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals stop translation

<400> 96
Met Met Lys Asp Val Phe Phe Phe Leu Phe Leu Leu Ala Val Trp Val
  1               5                  10                 15

Val Ser Phe Gly Val Ala Lys Gln Ala Ile Leu Ile His Asn Glu Arg
              20                  25                 30

Arg Val Asp Trp Leu Phe Arg Gly Pro Ser Thr Thr Pro Thr Ser Pro
           35                  40                 45

Ser Ser Gly Arg Ser Arg Ala Thr Ser Thr Val Xaa
     50                  55                 60


<210> 97
<211> 293
<212> PRT
<213> Homo sapiens

<400> 97
Met Ala Thr Ala Arg Pro Pro Trp Met Trp Val Leu Cys Ala Leu Ile
  1               5                  10                 15

Thr Ala Leu Leu Leu Gly Val Thr Glu His Val Leu Ala Asn Asn Asp
              20                  25                 30

Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly Ser Asn Gln
           35                  40                 45

Asp Leu Gly Ala Gly Ala Gly Glu Asp Ala Arg Ser Asp Asp Ser Ser
     50                  55                 60

Ser Arg Ile Ile Asn Gly Ser Asp Cys Asp Met His Thr Gln Pro Trp
 65                  70                 75                 80

Gln Ala Ala Leu Leu Leu Arg Pro Asn Gln Leu Tyr Cys Gly Ala Val
              85                  90                 95

Leu Val His Pro Gln Trp Leu Leu Thr Ala Ala His Cys Arg Lys Lys
             100                 105                110

Val Phe Arg Val Arg Leu Gly His Tyr Ser Leu Ser Pro Val Tyr Glu
```

60

```
                115                     120                     125
Ser Gly Gln Gln Met Phe Gln Gly Val Lys Ser Ile Pro His Pro Gly
        130                     135                     140

Tyr Ser His Pro Gly His Ser Asn Asp Leu Met Leu Ile Lys Leu Asn
145                     150                     155                     160

Arg Arg Ile Arg Pro Thr Lys Asp Val Arg Pro Ile Asn Val Ser Ser
                165                     170                     175

His Cys Pro Ser Ala Gly Thr Lys Cys Leu Val Ser Gly Trp Gly Thr
            180                     185                     190

Thr Lys Ser Pro Gln Val His Phe Pro Lys Val Leu Gln Cys Leu Asn
        195                     200                     205

Ile Ser Val Leu Ser Gln Lys Arg Cys Glu Asp Ala Tyr Pro Arg Gln
    210                     215                     220

Ile Asp Asp Thr Met Phe Cys Ala Gly Asp Lys Ala Gly Arg Asp Ser
225                     230                     235                     240

Cys Gln Gly Asp Ser Gly Gly Pro Val Val Cys Asn Gly Ser Leu Gln
                245                     250                     255

Gly Leu Val Ser Trp Gly Asp Tyr Pro Cys Ala Arg Pro Asn Arg Pro
            260                     265                     270

Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Lys Trp Ile Gln Glu Thr
        275                     280                     285

Ile Gln Ala Asn Ser
    290
```

<210> 98
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> Xaa equals stop translation

<400> 98
```
Met Ala Thr Ala Arg Pro Pro Trp Met Trp Val Leu Cys Ala Leu Ile
  1               5                   10                  15

Thr Ala Leu Leu Leu Gly Val Thr Glu His Val Leu Ala Asn Asn Asp
            20                  25                  30

Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly Ser Asn Gln
        35                  40                  45

Asp Leu Gly Ala Gly Ala Gly Gly Arg Arg Pro Val Gly Xaa
    50                  55                  60
```

```
<210> 99
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (132)
<223> Xaa equals stop translation

<400> 99
Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro
 1               5                  10                  15

Ser Pro Leu Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly
                20                  25                  30

Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn
            35                  40                  45

Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr
        50                  55                  60

Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro
65                  70                  75                  80

Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp Pro Thr
                85                  90                  95

Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Ser Arg Pro Phe Pro
            100                 105                 110

Gly Pro Ala Asp Gln Pro Asn Pro Leu Ala Ser Cys Thr Gln Gln Thr
            115                 120                 125

Pro Val Ser Xaa
        130


<210> 100
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (71)
<223> Xaa equals stop translation

<400> 100
Met Ala Asn Ala Gly Leu Gln Leu Leu Gly Phe Ile Leu Ala Phe Leu
 1               5                  10                  15

Gly Trp Ile Gly Ala Ile Val Ser Thr Ala Leu Pro Gln Trp Arg Ile
                20                  25                  30

Tyr Ser Tyr Ala Gly Asp Asn Ile Val Thr Pro Arg Pro Cys Thr Arg
            35                  40                  45
```

```
Gly Cys Gly Cys Pro Ala Cys Arg Arg Ala Pro Gly Arg Ser Ser Ala
      50                  55                  60

Lys Ser Leu Thr Pro Cys Xaa
 65                  70


<210> 101
<211> 9
<212> PRT
<213> Homo sapiens

<400> 101
Ile Lys Ile Ser Leu Lys Lys Arg Ser
 1               5


<210> 102
<211> 151
<212> PRT
<213> Homo sapiens

<400> 102
Ile Lys Ile Ser Leu Lys Lys Arg Ser Met Ser Gly Ile Ser Gly Cys
 1               5                  10                  15

Pro Phe Phe Leu Trp Gly Leu Leu Ala Leu Leu Gly Leu Ala Leu Val
            20                  25                  30

Ile Ser Leu Ile Phe Asn Ile Ser His Tyr Val Glu Lys Gln Arg Gln
        35                  40                  45

Asp Lys Met Tyr Ser Tyr Ser Ser Asp His Thr Arg Val Asp Glu Tyr
    50                  55                  60

Tyr Ile Glu Asp Thr Pro Ile Tyr Gly Asn Leu Asp Asp Met Ile Ser
 65                  70                  75                  80

Glu Pro Met Asp Glu Asn Cys Tyr Glu Gln Met Lys Ala Arg Pro Glu
                85                  90                  95

Lys Ser Val Asn Lys Met Gln Glu Ala Thr Pro Ser Ala Gln Ala Thr
                100                 105                 110

Asn Glu Thr Gln Met Cys Tyr Ala Ser Leu Asp His Ser Val Lys Gly
            115                 120                 125

Lys Arg Arg Ser Pro Gly Asn Arg Ile Leu Ile Ser Gln Thr Arg Met
    130                 135                 140

Glu Met Ser Asn Tyr Met Gln
145                 150


<210> 103
<211> 79
<212> PRT
<213> Homo sapiens
```

<400> 103
Gly Thr Arg Gly Leu Ser Thr Val Ser Trp Thr His Thr Gln Pro Ser
1   5   10   15

Lys Arg Gly Asp Pro Ser Arg Glu Pro Arg Gly Gly His Ser Cys Leu
            20   25   30

Leu Pro Gly Ser Pro Ala Thr Trp Cys Leu Pro Ala Pro Cys Ser Leu
        35   40   45

Pro Gly Pro Val Leu Thr Pro Ser Ser Ser Gly Leu Asp Ser Ala Leu
    50   55   60

Glu Gly Pro Arg Gly Ala Ala Ser Leu Leu Arg Ala Pro Leu Gln
65   70   75

<210> 104
<211> 23
<212> PRT
<213> Homo sapiens

<400> 104
His Thr Gln Pro Ser Lys Arg Gly Asp Pro Ser Arg Glu Pro Arg Gly
1   5   10   15

Gly His Ser Cys Leu Leu Pro
            20

<210> 105
<211> 22
<212> PRT
<213> Homo sapiens

<400> 105
Val Leu Thr Pro Ser Ser Ser Gly Leu Asp Ser Ala Leu Glu Gly Pro
1   5   10   15

Arg Gly Ala Ala Ser Leu
            20

<210> 106
<211> 180
<212> PRT
<213> Homo sapiens

<400> 106
Gly Thr Arg Gly Leu Ser Thr Val Ser Trp Thr His Thr Gln Pro Ser
1   5   10   15

Lys Arg Gly Asp Pro Ser Arg Glu Pro Arg Gly Gly His Ser Cys Leu
            20   25   30

Leu Pro Gly Ser Pro Ala Thr Trp Cys Leu Pro Ala Pro Cys Ser Leu
        35   40   45

Pro Gly Pro Val Leu Thr Pro Ser Ser Ser Gly Leu Asp Ser Ala Leu
     50   55   60

Glu Gly Pro Arg Gly Ala Ala Ser Leu Leu Arg Ala Pro Leu Gln Met
 65   70   75   80

Glu Glu Ala Ile Leu Val Pro Cys Val Leu Gly Leu Leu Leu Leu Pro
                 85   90   95

Ile Leu Ala Met Leu Met Ala Leu Cys Val His Cys His Arg Leu Pro
             100   105   110

Gly Ser Tyr Asp Ser Thr Ser Ser Asp Ser Leu Tyr Pro Lys Gly His
         115   120   125

Pro Val Gln Thr Ala Ser His Gly Cys Pro Leu Ala Thr Cys Leu Pro
     130   135   140

Thr Cys His Leu Leu Pro Thr Pro Glu Pro Ala Arg Pro Ala Pro His
145   150   155   160

Pro Lys Ile Pro Ala Ala Pro Trp Gly Leu Pro Pro Asp Ala Ile Phe
                 165   170   175

Pro Ala Gly Phe
             180

<210> 107
<211> 6
<212> PRT
<213> Homo sapiens

<400> 107
Cys Val His Cys His Arg
  1   5

<210> 108
<211> 11
<212> PRT
<213> Homo sapiens

<400> 108
Ala Gly Ser Arg Thr Asn Asn Glu Gln Ile Glu
  1   5   10

<210> 109
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 109

```
                                    65
Ala Gly Ser Arg Thr Asn Asn Glu Gln Ile Glu Met Ser Cys Ile Gly
 1               5                  10                  15

Arg Met Arg Leu Ile Cys Phe Ile Ile Leu Arg Ile Cys Gly Leu Glu
            20                  25                  30

His Leu Phe Gly Asn Met Gly Leu Gly Xaa Lys Asn Gly His Leu Pro
          35                  40                  45

Gly His Tyr Gly His Ser Leu Glu Phe Phe
    50                  55


<210> 110
<211> 16
<212> PRT
<213> Homo sapiens

<400> 110
Gly Thr Ser Thr Ser Ser Arg Gly Arg Leu His Ala Cys Gly His Ser
 1               5                  10                  15




<210> 111
<211> 95
<212> PRT
<213> Homo sapiens

<400> 111
Pro Ser Ser Glu Val Gln Lys Gly Lys Pro Asn Ser Pro Leu Gly Asn
 1               5                  10                  15

Ser Glu Leu Arg Pro His Leu Val Asn Thr Lys Pro Arg Thr Ser Leu
            20                  25                  30

Glu Arg Gly His Thr Ile Pro Phe Leu Trp Pro Ser Glu Phe Gly Leu
          35                  40                  45

Ser Gln Leu Trp Gly Thr Pro Ser Leu Asn Pro Asn Lys Thr Pro Leu
          50                  55                  60

Glu Ser Leu Ser Leu His Pro Ser Pro Leu Pro Ser Ala Leu Ile Ala
 65                  70                  75                  80

Ala Arg Ile Val Thr Pro Asn Leu Thr Leu Ser Ser Leu Ile Lys
                85                  90                  95


<210> 112
<211> 21
<212> PRT
<213> Homo sapiens

<400> 112
Pro Asn Ser Pro Leu Gly Asn Ser Glu Leu Arg Pro His Leu Val Asn
 1               5                  10                  15
```

```
Thr Lys Pro Arg Thr
            20


<210> 113
<211> 23
<212> PRT
<213> Homo sapiens

<400> 113
Leu Ser Leu His Pro Ser Pro Leu Pro Ser Ala Leu Ile Ala Ala Arg
  1               5                  10                  15


Ile Val Thr Pro Asn Leu Thr
            20


<210> 114
<211> 268
<212> PRT
<213> Homo sapiens

<400> 114
Pro Gly Ser Gln Gly Ala Ala Ala Gly Arg Glu Leu Phe Met Thr Asp
  1               5                  10                  15

Arg Glu Arg Leu Ala Glu Ala Arg Gln Arg Glu Leu Gln Arg Gln Glu
             20                  25                  30

Leu Leu Met Gln Lys Arg Leu Ala Met Glu Ser Asn Lys Ile Leu Gln
            35                  40                  45

Glu Gln Gln Glu Met Glu Arg Gln Arg Arg Lys Glu Ile Ala Gln Lys
    50                  55                  60

Ala Ala Glu Glu Asn Glu Arg Tyr Arg Lys Glu Met Glu Gln Ile Val
  65                  70                  75                  80

Glu Glu Glu Glu Lys Phe Lys Lys Gln Trp Glu Glu Asp Trp Gly Ser
                85                  90                  95

Lys Glu Gln Leu Leu Leu Pro Lys Thr Ile Thr Ala Glu Val His Pro
            100                 105                 110

Val Pro Leu Arg Lys Pro Lys Tyr Asp Gln Gly Val Glu Pro Glu Leu
            115                 120                 125

Glu Pro Ala Asp Asp Leu Asp Gly Gly Thr Glu Glu Gln Gly Glu Gln
    130                 135                 140

Asp Phe Arg Lys Tyr Glu Glu Gly Phe Asp Pro Tyr Ser Met Phe Thr
145                 150                 155                 160

Pro Glu Gln Ile Met Gly Lys Asp Val Arg Leu Leu Arg Ile Lys Lys
                165                 170                 175

Glu Gly Ser Leu Asp Leu Ala Leu Glu Gly Gly Val Asp Ser Pro Ile
            180                 185                 190
```

```
Gly Lys Val Val Val Ser Ala Val Tyr Glu Arg Gly Ala Ala Glu Arg
        195                 200                 205

His Gly Gly Ile Val Lys Gly Asp Glu Ile Met Ala Ile Asn Gly Lys
    210                 215                 220

Ile Val Thr Asp Tyr Thr Leu Ala Glu Ala Asp Ala Ala Leu Gln Lys
225                 230                 235                 240

Ala Trp Asn Gln Gly Gly Asp Trp Ile Asp Leu Val Val Ala Val Cys
                245                 250                 255

Pro Pro Lys Glu Tyr Asp Asp Glu Leu Thr Phe Phe
            260                 265


<210> 115
<211> 23
<212> PRT
<213> Homo sapiens

<400> 115
Gly Arg Glu Leu Phe Met Thr Asp Arg Glu Arg Leu Ala Glu Ala Arg
  1                 5                   10                  15

Gln Arg Glu Leu Gln Arg Gln
            20


<210> 116
<211> 22
<212> PRT
<213> Homo sapiens

<400> 116
Gln Gln Glu Met Glu Arg Gln Arg Arg Lys Glu Ile Ala Gln Lys Ala
  1                 5                   10                  15

Ala Glu Glu Asn Glu Arg
            20


<210> 117
<211> 25
<212> PRT
<213> Homo sapiens

<400> 117
Lys Pro Lys Tyr Asp Gln Gly Val Glu Pro Glu Leu Glu Pro Ala Asp
  1                 5                   10                  15

Asp Leu Asp Gly Gly Thr Glu Glu Gln
            20                  25


<210> 118
<211> 25
<212> PRT
```

<213> Homo sapiens

<400> 118
Ile Val Thr Asp Tyr Thr Leu Ala Glu Ala Asp Ala Ala Leu Gln Lys
 1   5   10   15

Ala Trp Asn Gln Gly Gly Asp Trp Ile
            20   25

<210> 119
<211> 113
<212> PRT
<213> Homo sapiens

<400> 119
Gly Thr Ser Thr Ser Ser Arg Gly Arg Leu His Ala Cys Gly His Ser
 1   5   10   15

Met Ile Leu Leu Leu Ser Leu Phe Gln Gly Val Arg Gly Ser Leu Gly
            20   25   30

Ser Pro Gly Asn Arg Glu Asn Lys Glu Lys Lys Val Phe Ile Ser Leu
            35   40   45

Val Gly Ser Arg Gly Leu Gly Cys Ser Ile Ser Ser Gly Pro Ile Gln
     50   55   60

Lys Pro Gly Ile Phe Ile Ser His Val Lys Pro Gly Ser Leu Ser Ala
 65   70   75   80

Glu Val Gly Leu Glu Ile Gly Asp Gln Ile Val Glu Val Asn Gly Val
                85   90   95

Asp Phe Ser Asn Leu Asp His Lys Glu Leu Gln Leu Ala Gly Ser Cys
            100   105   110

Ser

<210> 120
<211> 8
<212> PRT
<213> Homo sapiens

<400> 120
Gly Ile Ile Ala Gln Gly Lys Ser
 1   5

<210> 121
<211> 33
<212> PRT
<213> Homo sapiens

<400> 121
His Thr Met Leu Pro Leu Lys Ile Ala Ala Pro Tyr Leu Leu Glu Asn
 1   5   10   15

```
Cys Ser Cys Pro Ile Tyr Ile Ser Thr Ser Pro His Leu Phe Leu Ser
            20                  25                  30

Thr


<210> 122
<211> 19
<212> PRT
<213> Homo sapiens

<400> 122
Phe Ser Ile Leu Phe Ala Phe Val Leu Phe Tyr Pro Gly Ser Phe Phe
  1               5                  10                  15

Thr Leu Pro


<210> 123
<211> 60
<212> PRT
<213> Homo sapiens

<400> 123
Phe Ser Ile Leu Phe Ala Phe Val Leu Phe Tyr Pro Gly Ser Phe Phe
  1               5                  10                  15

Thr Leu Pro Met Tyr Met Lys Gln Val Val Ala Cys Arg Asp Gln Leu
            20                  25                  30

Ile Leu Val Leu Trp Leu Ile Glu Leu Leu Cys Ile Gln Gly Phe Cys
            35                  40                  45

Lys Ser Lys Ser Asp Phe Ser Ser Arg Ile Tyr Ser
      50                  55                  60


<210> 124
<211> 6
<212> PRT
<213> Homo sapiens

<400> 124
His Glu Ser Thr Val Lys
  1               5


<210> 125
<211> 27
<212> PRT
<213> Homo sapiens

<400> 125
Leu Glu Asn Leu Gly Thr His Lys Lys Lys Asp Ser Phe Ser Val Lys
  1               5                  10                  15
```

Thr Val Gly Ile Cys Cys Phe His Leu Asn
    20   25

<210> 126
<211> 84
<212> PRT
<213> Homo sapiens

<400> 126
Leu Glu Asn Leu Gly Thr His Lys Lys Lys Asp Ser Phe Ser Val Lys
1   5   10   15

Thr Val Gly Ile Cys Cys Phe His Leu Asn Met Leu Tyr Phe Cys
    20   25   30

Ser Ser Ile Trp Phe Gly Ile Tyr Phe Val Ala Leu Ile Thr Val Phe
    35   40   45

Leu Lys Thr Leu Pro Pro Leu Thr Val Gly Lys Gly Pro Phe Ser Gly
   50   55   60

Lys Phe Val Ala Phe Phe Phe Phe Leu Lys Glu Ser Cys Ser Leu Leu
65   70   75   80

Ser Ile Val Phe

<210> 127
<211> 6
<212> PRT
<213> Homo sapiens

<400> 127
Phe Thr Lys Cys Phe His
1   5

<210> 128
<211> 8
<212> PRT
<213> Homo sapiens

<400> 128
Gln Asn Met Asn Asp Tyr Asn Ile
1   5

<210> 129
<211> 81
<212> PRT
<213> Homo sapiens

<400> 129
Gln Asn Met Asn Asp Tyr Asn Ile Met Phe Tyr Leu Tyr Ser Ile Phe
1   5   10   15

Gln Val Leu Val Trp Leu Cys Gln Ala Lys His Leu Ser Gln Ile Ser

```
                 20                     25                      30
Ala Arg Ser Ser Arg Arg Leu Trp Arg Leu Ser Leu Ile Thr Phe Pro
            35                  40                  45

Pro Tyr Leu Ala Thr Ser Leu Ser His Gly Pro His Val Cys Leu Gln
    50                  55                  60

Thr Leu Gly Tyr Glu Ser Cys Glu His Thr Asp Leu Cys Phe Leu His
 65                  70                  75                  80

Asp



<210> 130
<211> 51
<212> PRT
<213> Homo sapiens

<400> 130
Pro Ala Arg His Leu Trp Thr Pro Ser Pro Val Cys Lys Pro Ser Ile
 1               5                   10                  15

Lys Pro His Val Ser Phe Ala Gly Ser Gly Ser Leu Trp Arg Leu Glu
            20                  25                  30

Pro Tyr Ala Phe Pro Ile Glu Val Asn Arg Gly Ser Ala Gln His Trp
        35                  40                  45

Val Pro Gly
     50


<210> 131
<211> 29
<212> PRT
<213> Homo sapiens

<400> 131
Val Cys Lys Pro Ser Ile Lys Pro His Val Ser Phe Ala Gly Ser Gly
 1               5                   10                  15

Ser Leu Trp Arg Leu Glu Pro Tyr Ala Phe Pro Ile Glu
            20                  25


<210> 132
<211> 48
<212> PRT
<213> Homo sapiens

<400> 132
Met Gln Pro Cys Leu Phe Met Phe Val Leu Met Gly Ile Met Trp Ala
 1               5                   10                  15

Thr Gly Ile Leu Pro Lys Ile Met Pro Ser Arg Lys Arg Cys Leu Ser
            20                  25                  30
```

Ile Asp Ile Pro Ala Ala Pro Gln Ala Gly Met Cys Leu Leu Ile Leu
            35   40   45

<210> 133
<211> 32
<212> PRT
<213> Homo sapiens

<400> 133
Gln Phe Ser Phe Leu Ser Ala Lys Gly Leu His Trp Ala Leu Phe Val
 1   5   10   15

Phe Phe Tyr Phe Leu Ser Thr Ala Cys Gln Arg Trp Ala Trp Gly Leu
            20   25   30

<210> 134
<211> 77
<212> PRT
<213> Homo sapiens

<400> 134
Gln Phe Ser Phe Leu Ser Ala Lys Gly Leu His Trp Ala Leu Phe Val
 1   5   10   15

Phe Phe Tyr Phe Leu Ser Thr Ala Cys Gln Arg Trp Ala Trp Gly Leu
            20   25   30

Met Arg Thr Leu Ala Leu Leu Val Leu Leu Phe Cys Ser Cys Thr His
            35   40   45

Ser Ser Met Gly Trp Gly Arg Gln Ala Trp Gly Val Ala Leu Gly Glu
    50   55   60

Val Arg Ser Pro Pro Ala Gln Asp Thr Val Ala Lys Thr
 65   70   75

<210> 135
<211> 82
<212> PRT
<213> Homo sapiens

<400> 135
His Glu Pro Gly Arg Cys Gly Pro Glu Asn Leu Ala Leu Gln Ala Thr
 1   5   10   15

Gln Arg Gly Thr Arg Phe Ser Val Pro Met Cys Lys Ser Ser Arg Gln
            20   25   30

Tyr Thr Tyr Thr Ser Val His Met Cys Gln Cys Ala Cys Glu Arg Val
            35   40   45

```
Glu Trp Arg Gly Ser Leu Thr Pro Ala Arg Ala Leu His Asn His Leu
    50                  55                  60

Thr Glu Gln Trp Phe Pro His Gly Phe Pro Phe Leu Ser Arg Phe Phe
 65                  70                  75                  80

Thr Tyr
```

```
<210> 136
<211> 24
<212> PRT
<213> Homo sapiens

<400> 136
Glu Asn Leu Ala Leu Gln Ala Thr Gln Arg Gly Thr Arg Phe Ser Val
 1               5                  10                  15

Pro Met Cys Lys Ser Ser Arg Gln
            20
```

```
<210> 137
<211> 26
<212> PRT
<213> Homo sapiens

<400> 137
Met Cys Gln Cys Ala Cys Glu Arg Val Glu Trp Arg Gly Ser Leu Thr
 1               5                  10                  15

Pro Ala Arg Ala Leu His Asn His Leu Thr
            20                  25
```

```
<210> 138
<211> 12
<212> PRT
<213> Homo sapiens

<400> 138
Leu Arg Arg Ala Ser Cys Pro Ile Trp Ser Lys Asp
 1               5                  10
```

```
<210> 139
<211> 58
<212> PRT
<213> Homo sapiens

<400> 139
Leu Arg Arg Ala Ser Cys Pro Ile Trp Ser Lys Asp Gly Lys Thr Leu
 1               5                  10                  15

Tyr Leu Pro Val Cys Leu Ser Phe Leu His Ser Pro Ala Ser Thr Phe
            20                  25                  30
```

Leu Pro Trp Asn Gln Gly Phe Leu Ser Pro Phe Ala Phe Ser Thr Leu
        35   40   45

Gly Thr Pro Gly Ala Lys Gln Phe Ser Ile
      50   55

<210> 140
<211> 166
<212> PRT
<213> Homo sapiens

<400> 140
Gly Thr Ser Thr Lys Leu Pro Tyr Cys Arg Glu Asn Val Cys Leu Ala
1   5   10   15

Tyr Gly Ser Glu Trp Ser Val Tyr Ala Val Gly Ser Gln Ala His Val
            20   25   30

Ser Phe Leu Asp Pro Arg Gln Pro Ser Tyr Asn Val Lys Ser Val Cys
        35   40   45

Ser Arg Glu Arg Gly Ser Gly Ile Arg Ser Val Ser Phe Tyr Glu His
      50   55   60

Ile Ile Thr Val Gly Thr Gly Gln Gly Ser Leu Leu Phe Tyr Asp Ile
65   70   75   80

Arg Ala Gln Arg Phe Leu Glu Glu Arg Leu Ser Ala Cys Tyr Gly Ser
                85   90   95

Lys Pro Arg Leu Ala Gly Glu Asn Leu Lys Leu Thr Thr Gly Lys Gly
            100   105   110

Trp Leu Asn His Asp Glu Thr Trp Arg Asn Tyr Phe Ser Asp Ile Asp
        115   120   125

Phe Phe Pro Asn Ala Val Tyr Thr His Cys Tyr Asp Ser Ser Gly Thr
    130   135   140

Lys Leu Phe Val Ala Gly Gly Pro Leu Pro Ser Gly Leu His Gly Asn
145   150   155   160

Tyr Ala Gly Leu Trp Ser
                165

<210> 141
<211> 22
<212> PRT
<213> Homo sapiens

<400> 141
Cys Arg Glu Asn Val Cys Leu Ala Tyr Gly Ser Glu Trp Ser Val Tyr
1   5   10   15

Ala Val Gly Ser Gln Ala
            20

<210> 142
<211> 24
<212> PRT
<213> Homo sapiens

<400> 142
Pro Ser Tyr Asn Val Lys Ser Val Cys Ser Arg Glu Arg Gly Ser Gly
1   5   10   15

Ile Arg Ser Val Ser Phe Tyr Glu
            20

<210> 143
<211> 29
<212> PRT
<213> Homo sapiens

<400> 143
Asp Ile Arg Ala Gln Arg Phe Leu Glu Glu Arg Leu Ser Ala Cys Tyr
1   5   10   15

Gly Ser Lys Pro Arg Leu Ala Gly Glu Asn Leu Lys Leu
            20   25

<210> 144
<211> 26
<212> PRT
<213> Homo sapiens

<400> 144
Lys Leu Thr Thr Gly Lys Gly Trp Leu Asn His Asp Glu Thr Trp Arg
1   5   10   15

Asn Tyr Phe Ser Asp Ile Asp Phe Phe Pro
            20   25

<210> 145
<211> 21
<212> PRT
<213> Homo sapiens

<400> 145
Tyr Asp Ser Ser Gly Thr Lys Leu Phe Val Ala Gly Gly Pro Leu Pro
1   5   10   15

Ser Gly Leu His Gly
            20

<210> 146
<211> 280
<212> PRT
<213> Homo sapiens

<400> 146

```
Lys Pro Gln Arg Phe Arg Arg Pro Phe Phe Phe Asn His Pro Lys Pro
  1               5                  10                  15

Ser Ser His Pro Gly Leu His Ser Arg Pro Thr Leu His Ser His Pro
             20                  25                  30

Ala Phe His Ser His Pro Glu Leu Gln Gln Pro Thr Gln Thr Ser Pro
         35                  40                  45

Val Pro Leu Thr Pro Glu Ser Pro Leu Phe Gln Asn Phe Ser Gly Tyr
     50                  55                  60

His Ile Gly Val Gly Arg Ala Asp Cys Thr Gly Gln Val Ala Asp Ile
 65                  70                  75                  80

Asn Leu Met Gly Tyr Gly Lys Ser Gly Gln Asn Ala Gln Gly Ile Leu
                 85                  90                  95

Thr Arg Leu Tyr Ser Arg Ala Phe Ile Met Ala Glu Pro Asp Gly Ser
             100                 105                 110

Asn Arg Thr Val Phe Val Ser Ile Asp Ile Gly Met Val Ser Gln Arg
         115                 120                 125

Leu Arg Leu Glu Val Leu Asn Arg Leu Gln Ser Lys Tyr Gly Ser Leu
     130                 135                 140

Tyr Arg Arg Asp Asn Val Ile Leu Ser Gly Thr His Thr His Ser Gly
145                 150                 155                 160

Pro Ala Gly Tyr Phe Gln Tyr Thr Val Phe Val Ile Ala Ser Glu Gly
                 165                 170                 175

Phe Ser Asn Gln Thr Phe Gln His Met Val Thr Gly Ile Leu Lys Ser
             180                 185                 190

Ile Asp Ile Ala His Thr Asn Met Lys Pro Gly Lys Ile Phe Ile Asn
     195                 200                 205

Lys Gly Asn Val Asp Gly Val Gln Ile Asn Arg Ser Pro Tyr Ser Tyr
    210                 215                 220

Leu Gln Asn Pro Gln Ser Glu Arg Ala Arg Tyr Ser Ser Asn Thr Asp
225                 230                 235                 240

Lys Glu Met Ile Val Leu Lys Met Val Asp Leu Asn Gly Asp Asp Leu
                 245                 250                 255

Gly Leu Ile Ser Phe Ser Phe Ser Lys Ser Ala Leu Gly Thr Tyr Tyr
             260                 265                 270

Glu Pro Arg Asn Thr Ser Leu Glu
             275                 280
```

<210> 147
<211> 30
<212> PRT
<213> Homo sapiens

<400> 147
Lys Pro Ser Ser His Pro Gly Leu His Ser Arg Pro Thr Leu His Ser
 1   5   10   15

His Pro Ala Phe His Ser His Pro Glu Leu Gln Gln Pro Thr
            20   25   30

<210> 148
<211> 26
<212> PRT
<213> Homo sapiens

<400> 148
Arg Ala Asp Cys Thr Gly Gln Val Ala Asp Ile Asn Leu Met Gly Tyr
 1   5   10   15

Gly Lys Ser Gly Gln Asn Ala Gln Gly Ile
            20   25

<210> 149
<211> 24
<212> PRT
<213> Homo sapiens

<400> 149
Arg Ala Phe Ile Met Ala Glu Pro Asp Gly Ser Asn Arg Thr Val Phe
 1   5   10   15

Val Ser Ile Asp Ile Gly Met Val
            20

<210> 150
<211> 27
<212> PRT
<213> Homo sapiens

<400> 150
Arg Leu Gln Ser Lys Tyr Gly Ser Leu Tyr Arg Arg Asp Asn Val Ile
 1   5   10   15

Leu Ser Gly Thr His Thr His Ser Gly Pro Ala
            20   25

<210> 151
<211> 23
<212> PRT
<213> Homo sapiens

<400> 151
Ala Ser Glu Gly Phe Ser Asn Gln Thr Phe Gln His Met Val Thr Gly
 1   5   10   15

Ile Leu Lys Ser Ile Asp Ile
            20